

PROSPECTUS 2002

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Department of Surgery
The University of Hong Kong

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Contents

Message from Professor John Wong	2
1 A Cherished History	4
2 A New Look for The New Millennium	8
3 Under One Roof: The Network Hospitals	12
4 Departmental Administration and Activities	17
5 Division Reports	
• <i>Division of Breast Surgery</i>	20
• <i>Division of Cardiothoracic Surgery</i>	24
• <i>Division of Colorectal Surgery</i>	28
• <i>Division of Endocrine Surgery</i>	34
• <i>Division of Esophageal Surgery</i>	38
• <i>Divisions of Head and Neck Surgery/ Plastic and Reconstructive Surgery/ Otorhinolaryngology</i>	42
• <i>Division of Hepatobiliary/ Pancreatic Surgery and Liver Transplantation</i>	49
• <i>Division of Neurosurgery</i>	53
• <i>Division of Paediatric Surgery</i>	56
• <i>Division of Upper Gastrointestinal Surgery</i>	62
• <i>Division of Urology</i>	66
• <i>Division of Vascular Surgery</i>	70
6 Centre for Education & Training	78
7 Research Laboratories	82
8 Special Service Centres	86
9 The Jockey Club Skills Development Centre	92
10 Conferences, Forums and Lectures	96
11 The Lighter Side	100
12 Honours and Awards	102
13 Appendices	108

Message from Professor John Wong



*Professor John Wong
Head, Department of Surgery*

Incredibly, five years have passed since our last Prospectus. It did not seem so long ago that we witnessed the start of a new millennium, and before that, the handover of Hong Kong from British sovereignty to China, and its establishment as a Special Administrative Region. In that time also, we have accomplished our set goals in clinical services, research activities and teaching – exceeding our expectations in many instances. Since then, as with other institutions, the Department has had to “right-size” itself. In spite of this challenge, we have held fast to our long-term plans for the future.

In these lean times, we are fortunate to see the opening of the Faculty of Medicine Building and new developments within the Department of Surgery. The generosity of our many benefactors, in particular, Mr. Sun Chieh Yeh and Mr. Cheung Kung Hai, has helped cushion the impact of our diminishing budget. Departmental activities and administration have been made more efficient and reorganised so as to devolve most responsibilities from the department level to the division level. This restructuring included the streamlining of academic and support staff, and has enabled us to operate more effectively.

On the research front, in line with our University mission, which is to achieve the highest standard of scholarly pursuits, we have made heavy investment in recruiting expertise and upgrading laboratory facilities. This has resulted in substantial improvements in both research quantity and quality. In turn, this has led to increasing collaborations between the Department and institutions worldwide. Our research output has grown steadily over the years, as has the number of surgeons and students that we have successfully supervised. For example, in the past five years, from 1997 to the end of 2001, graduates who had completed their studies at the Department included: MD (1), MS (14), PhD (5), MPhil (7), and MMedSc (5). A comprehensive list of publications of the Department can be viewed in the CD-ROM that accompanies this Prospectus.

The Division of Education and Training was established in 1996 with the aim to enhance teaching and training responsibilities of the Department. Further development of undergraduate medical education resulted in the expansion of the Division to become the Centre for Education & Training (CET) in 2000. The success of the CET in implementing the New Medical Curriculum has seen the departure from traditional teaching methods to pedagogy founded on student learning, and has focussed on problem-based learning and interactive teaching at the bedside. In 2002, the Faculty of Medicine will see the first medical graduates to have benefited from this new teaching mode, and we keenly await its impact on their clinical practice. In response to the growing demands of training for modern surgery in a new community culture, our Jockey Club Skills Development Centre has tailored courses, such as the Advanced Trauma Life Support Course and the Advanced Course in Laparoscopy, to enable doctors, nurses and other healthcare professionals to acquire new skills to meet increasing expectations with safety.

On the clinical front, we have achieved a number of surgical innovations: the maxillary swing approach for resection of nasopharyngeal carcinoma developed by

Professor William I. Wei, and the first successful living-related right lobe liver transplant in adults, performed by the hepatobiliary team under the leadership of Professor Sheung-tat Fan. These are world firsts. The University of Hong Kong awarded the Outstanding Researcher Award and the Distinguished Research Achievement Award, respectively, to Professor Wei and Professor Fan in recognition of their research endeavours. Efforts of other Divisions, such as Cardiothoracic Surgery with heart-lung transplantations, have also brought great credit to the Department in its service to Hong Kong

Operations that were associated with a high mortality rate as recently as ten years ago, such as those for esophageal and liver cancers, are now performed with zero or near zero mortality, even among high-risk patients. The overall results in clinical service across the whole spectrum of general and subspecialty surgery are on par with the best in the world. Patients can be assured that they will receive some of the best care anywhere when they come through our doors.

Of our other professional activities, we are proud to host the Hong Kong Surgical Forum, which has become a biannual tradition attracting participation from the international surgical community since its inception in 1983. The GB Ong Lecture and the Digby Memorial Lecture, scheduled during this year's Surgical Forum, drew high attendance signifying that the event has secured a prominent place in the surgical calendar. A post-Forum visit to China, initiated in 1995, provides a valuable venue to exchange expertise and foster overseas collaboration.

In 2001, we witnessed the introduction of three inaugural events. In April, the Department hosted the Valedictory Lecture, "Microcosmographia Academica Revisited", by Professor Felice Lieh-Mak, Head and Chair of the Department of Psychiatry on the occasion of her retirement from the University. Six months later in October, Professor William I. Wei delivered to a standing-room only auditorium, the first Distinguished Lecture, entitled "Nasopharyngeal Cancer: From Myth to Reality" – a series initiated by the Department. The third unique event was the Festschrift for Professor GB Ong that took place in November, which marked the 20th anniversary of our much-respected mentor's retirement from the Department. We were delighted to see so many of our friends and colleagues, many based abroad, who had made the trip especially. Memories of Professor Ong and the Festschrift, which was at once rip-roaringly humorous and yet profoundly inspirational, will remain in the minds of all those who were there to pay tribute and homage to a truly great leader. These three events were entirely memorable and indicate the deep respect with which the medical community regards leaders in surgery in Hong Kong.

Throughout the climate of change that has taken place since the last Prospectus, thoughts of our many "Friends of the Department" have never strayed far. We hope this Prospectus will keep our friends and associates informed of our progress, and to assure them that their contributions to the Department will always be remembered. With the support and encouragement from our colleagues and community, I am certain that we can set an even higher benchmark in our chosen specialty in the future.

John Wong
2002



A Cherished History

For more than a century, surgery in Hong Kong has been inexorably linked to education, first at the Hong Kong College of Medicine for Chinese founded in 1887, and later at the renamed Hong Kong College of Medicine in 1907.



Dr. Sun Yat-sen, one of the first graduates of the Hong Kong College of Medicine

Counted among the first graduates was the father of modern China, Dr. Sun Yat-sen.

The Alice Ho Miu Ling Nethersole Hospital was used as the College even as it became the Faculty of Medicine in 1911, with the creation of The University of Hong Kong. In 1935, some time after the Digby School of Surgery was established, the Department moved to the new Digby Building. Clinical surgery teaching came to Queen Mary Hospital in 1937 when the hospital was opened.

In 1967, the Department was transferred to the Professorial Block in the Hospital compound, a building that, together with the New Clinical Building, housed all clinical departments of the Faculty of

Medicine. While the offices on the second floor of the Professorial Block still serve as the centre of activities, departmental academic and clinical functions now involve several other hospitals and sites. This year will see the transfer of all laboratory research activities to the Faculty of Medicine Building.



The Faculty of Medicine Building opened in 2002

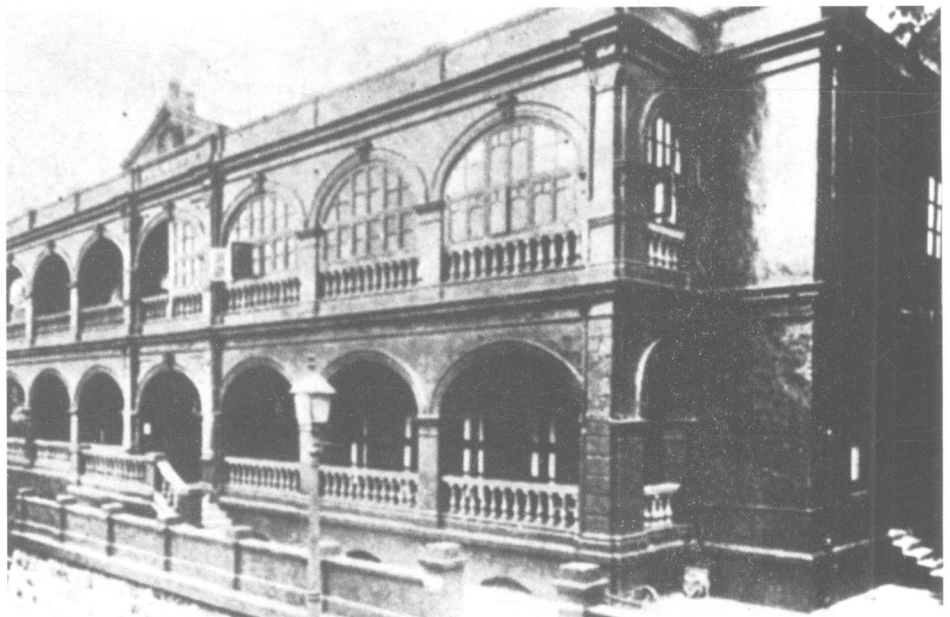
2001 marked the 90th Anniversary of The University of Hong Kong. In March, 800 guests were welcomed to the Sun Yat-sen Place for an evening of bagpipes, songs and poetry to help celebrate this important milestone in the University's history.

The Grand Reunion that took place in December, in which the Honourable Tung Chee Wah, Chancellor of the University and Chief Executive of the Government of the Hong Kong SAR, was the guest of honour,

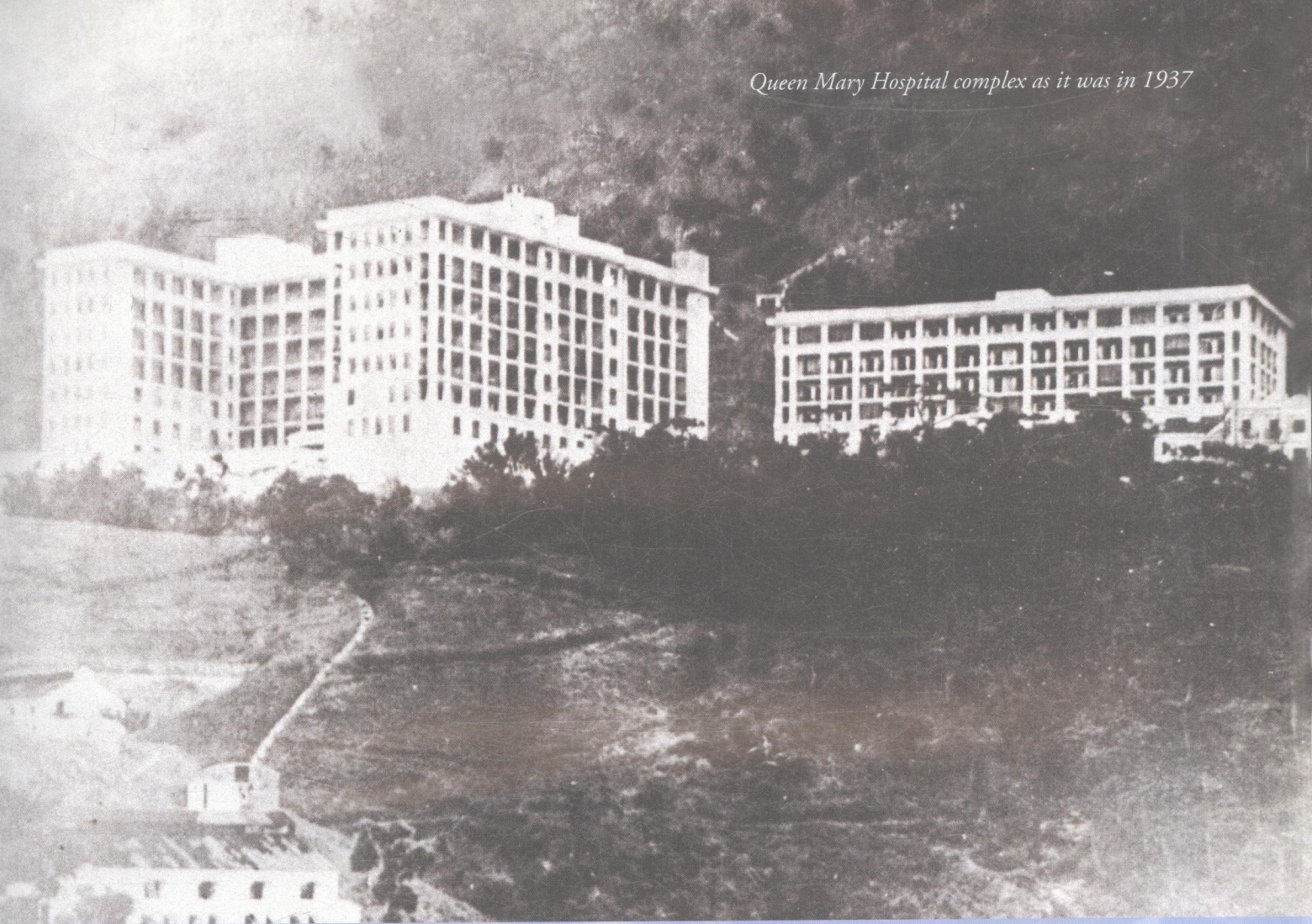


Digby School of Surgery. In 1997 the building was demolished

The Hong Kong College of Medicine was established in 1887. This photograph was taken in 1906



Queen Mary Hospital complex as it was in 1937



Queen Mary Hospital complex as it looks in 2001



portended a spectacular climax to the 90th Anniversary Celebrations. Over 3,000 local and overseas alumni were there to enjoy this mission-sharing dinner, which commemorated the past nine decades of achievement, as well as recognised the efforts of all those who have helped to shape the University's vision for continuing commitment to scholarship, learning, service and social fulfillment.



The Grand Reunion provided a spectacular climax to the 90th Anniversary Celebrations

DEPARTMENT HEADS

Since its inception more than 100 years ago, in 1887, the Department has been led by only ten Heads. This has helped to provide the continuity that was badly needed during some of the more turbulent times in the Department's history.

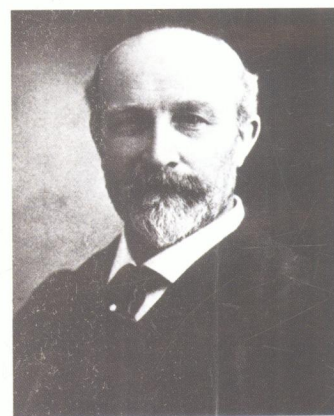
<i>Head of Department</i>	<i>Date</i>
GP Jordon	1888-1889
J Cantlie	1889-1896
JC Thompson	1896-1897
A Rennie	1897-1905
WVM Koch	1905-1912
KH Digby	1915-1945
J Gray (<i>acting</i>)	1945-1948
FE Stock	1948-1963
GB Ong	1963-1982
J Wong	1982-present

A special mention must be made of Professors Cantlie and Digby who “built the foundation”, Professor Ong who put “Hong Kong on the world map”, and Professor Wong

who “brought the world to Hong Kong”. The following are the briefest of descriptions on each of the leaders. To fully record their lives, accomplishments and achievements would need much more space than we have here.

Professor (Sir) James Cantlie (1886-1896)

Professor Cantlie graduated from Aberdeen, Scotland and came to Hong Kong in 1887 as a missionary and doctor. He was also a co-founder of the Hong Kong College of Medicine for Chinese. His great experience in teaching in London provided a solid foundation for the new medical school. His favourite student of the time was a young man by the name of Sun Yat-sen. Professor Cantlie is well recognised in the literature for ‘Cantlie’s line’, which delineates the surgical anatomy of the liver.



Professor (Sir) James Cantlie

Professor Kenelm H Digby (1915-1945)

Professor Digby was named Professor of Anatomy in 1913, and then the Ho Tung Chair in Clinical Surgery. He took over as Head of the Department of Clinical Surgery just as the Faculty of Medicine was established. Professor Digby was a meticulous surgeon who operated with perfect anatomical dissection. His obsession with the 'no touch technique' during operations was legendary. Professor



Professor Kenelm H Digby

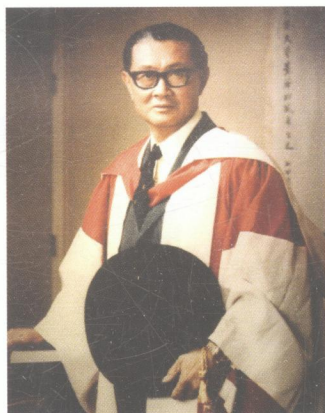


Professor Digby demonstrating a dissection (circa 1938)

Digby's long tenure as Head of the Department ended with his internment during the Second World War. He entered private practice after the war, and was appointed Emeritus Professor until his death in 1954.

Professor Tan Sri Guan Bee Ong (1963-1982)

Professor GB Ong was the first ethnic Chinese to lead the Department. Visitors to Hong Kong who are in the field of surgery always make an effort to meet Professor Ong as a matter of privilege and pilgrimage. Professor Ong retired from active private practice in 2000. A graduate of The University of Hong Kong, he is famous for his stamina, and his determination to provide the best of care for his patients. Professor Ong put Hong Kong on the world map of surgery .



Professor Tan Sri Guan Bee Ong

Professor John Wong (1982-present)

Professor Wong took over as Head of the Department following the retirement of Professor Ong from the Faculty. Professor Wong is a graduate of the University of Sydney and came to Hong Kong in 1975. The Department's stature, reputation and standards have blossomed under his leadership with a spectacular rise in its standing in the surgical world. The Department has excelled in esophageal surgery, living-related liver transplantation, as well as head and neck surgery and other subspecialised areas. In the field of education, the Hong Kong Medical Council has singled out the Department of Surgery for its innovations and initiatives in medical education as a model for others to follow.



Professor John Wong





A New Look for The New Millennium

The ushering in of a new millennium was celebrated not so long ago, and with that behind us, the Department of Surgery is looking forward to many challenges. The groundwork that the Department had laid in the past provides a solid platform on which it can stride with confidence.

In response to the ever-growing demands placed on the Department, and in spite of decreasing resources, an additional range of services and facilities has been created and established. These include new centres and units as well as the consolidation of existing facilities.

Renovations throughout the Department are underway and have already invigorated those divisions and facilities that have benefited to date. For example, the rejuvenation of the



Reception, Professorial Block

THE DIVISION SYSTEM

The Division of Paediatric Surgery was established in 1982. That same year, Cardiothoracic Surgery was also defined as a Division. Today, the clinical specialties are organised into various Specialist Surgical Divisions (Table 1). Each Division is led by an appointed Chief and is given autonomy to tend to the well-being of its own patients and be responsible in various key areas such as outpatient clinics, staff training, research and scientific publications as well as the procurement of equipment and consumables.

The structure of each Division including its services and achievements are described in detail in Chapter 5.



The fully automated 5th Floor Lecture Theatre, Professorial Block

Professorial Block made possible the provision of video-conferencing facilities for all staff and visitors. In addition, the upgrading of the 5th Floor Lecture Theatre has enabled the Department to enjoy the benefits that come with a fully automated auditorium. Other makeovers include the new Outpatient Clinic (S Block) floors K4 and K14, the E5 office, as well as much improved laboratory facilities in the New Clinical Building.



The rejuvenated Professorial Block houses the central administrative offices of the Department

Divisions of the Department

<i>Division</i>	<i>Chief</i>
Breast Surgery	Dr. LWC Chow
Cardiothoracic Surgery	Dr. SW Chiu
Colorectal Surgery	Dr. KW Chu
Endocrine Surgery	Dr. CY Lo
Esophageal Surgery	Professor J Wong / Dr. S Law
Head and Neck / Plastic & Reconstructive Surgery	Professor WI Wei / Dr. LK Lam
Hepatobiliary and Pancreatic Surgery	Professor ST Fan / Professor CM Lo
Liver Transplantation	Professor ST Fan / Professor CM Lo
Neurosurgery	Dr. YW Fan
Otorhinolaryngology	Professor WI Wei / Dr. PW Yuen
Paediatric Surgery	Professor P Tam
Upper Gastrointestinal Surgery	Dr. KM Chu
Urology	Dr. PC Tam
Vascular Surgery	Professor SWK Cheng

Table 1

MEDICAL STAFF

The current medical staff of the Department is made up of 43 senior staff, 31 senior residents, 15 residents, and 25 interns. The Department also benefits from the expertise of 75 Honorary Clinical Teachers – surgeons based in designated network hospitals, or who

are in private practice – most of whom are actively involved in our teaching programmes. For example, clinical teaching of the Senior Clerkship is undertaken by colleagues at Caritas Medical Centre, Kwong Wah Hospital, Queen Elizabeth Hospital, and Ruttonjee Hospital.

Chair Professors

Chair of Surgery	John WONG
Chair of Paediatric Surgery	Htut SAING
William Mong Chair in Otorhinolaryngology	William Ignace WEI
Chair of Paediatric Surgery	Paul Kwong Hang TAM
Sun Chieh Yeh Chair of Hepatobiliary Surgery	Sheung Tat FAN

Professors

Stephen Wing Keung CHENG is Chief, Division of Vascular Surgery
Chung Mau LO is Professor of Surgery in the Division of Hepatobiliary/Pancreatic Surgery and Liver Transplantation

CENTRES

Clinical

Since 1997, the Department has made significant strides in its pursuit of excellence. The Department has established specialised clinical Centres with the aim of not only increasing the facilities and services provided but also improving the performance of staff in the discharge of their academic duties (Table 2). Detailed descriptions of the Centres can be found in Chapter 8.

Special Service Centres of the Department

<i>Centre</i>
Centre for the Study of Liver Disease
Chiang Cheung Chun Fong Surgery Day Centre
Francis Y.H. Tien Vascular Disease Centre
Hong Kong Jockey Club Lithotripsy Centre
Jockey Club Skills Development Centre
Surgical Endoscopy Centre

Table 2

Non-clinical

A special mention must be made of the Centre for Education & Training (CET), a non-clinical Centre headed by Professor Saing. The aim of the Centre is to provide a cohesive and structured surgical education for medical students in addition to providing continuing

medical education for medical professionals. Visitors to the Department have invariably complimented and endorsed the Department's vision in establishing the CET. Chapter 6 provides a full description of this important Centre of the Department of Surgery.

DEPARTMENTAL SUPPORT UNITS

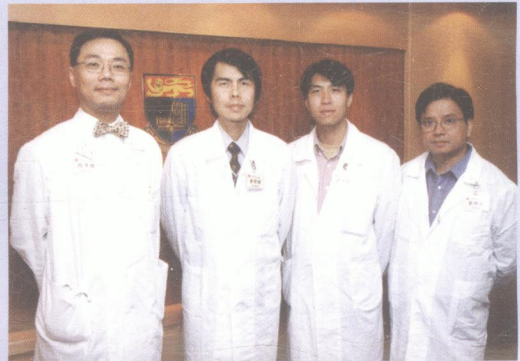
A number of support Units has been established in order to optimise the Department's activities (Table 3).

Support Units of the Department

Information Technology

Services Provided

Information technology and computing-related services and support in addition to those provided by the University



Information Technology Unit in 2001

Audio-visual / Photography Laboratory

Services Provided

Photography including clinical activities; audio-visual services including recording, editing and dubbing; digitised medical illustrations and related artwork

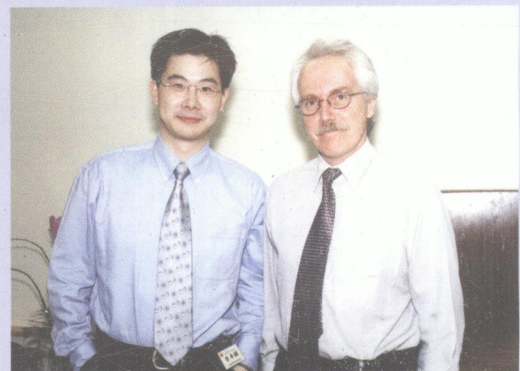


Staff of the Audio-visual / Photography Laboratory in 2001

Technical Writing

Services Provided

Writing of documents; advising on manuscripts; editing; presentation skills; use of English language workshops



Technical Writing Unit in 2001

Table 3

RESEARCH LABORATORIES



Research laboratories are located in the Faculty of Medicine Building

Excellence in research is the hallmark of all leading departments and institutions. To perform research of the highest quality, facilities must also be first-class. Table 4 shows the various research laboratories/ facilities of the

Department. Detailed descriptions of each laboratory can be found in Chapter 7.

Many of the Department's published research appear in the most prestigious international journals such as *Annals of Surgery*. The Department accords quality research among its highest priorities and is justifiably proud of its efforts in establishing laboratories in various research areas.

Research Laboratories / Facilities of the Department

Research laboratory / Facility

Animal research laboratory

Biochemistry laboratory

Clinical oncology laboratory

Hepato-oncology laboratory

Histopathology laboratory

Tissue culture facility

Table 4

NETWORK HOSPITALS

Hospitals in the Department of Surgery's network include Queen Mary Hospital, often seen as the flagship hospital of the Hospital Authority of the Hong Kong Special Administrative Region; Tung Wah Hospital; Grantham Hospital; and Kwong Wah Hospital.

More details on these institutions can be found in Chapter 3. The Department cooperates with the network hospitals in all affairs relating to surgery and other activities. These include matters such as patient care and teaching of students and residents.



Queen Mary Hospital is one of the Department's network hospitals



Under One Roof: The Network Hospitals

The Department of Surgery resides primarily in Queen Mary Hospital (QMH), often seen as the flagship hospital of the Hospital Authority. The Department's clinical responsibilities are not, however, limited to QMH. Close cooperation also exists with other network hospitals on

all matters relating to the care of surgical patients as well as other activities such as teaching of students and residents. (Table 1)

Statistics on the total number of surgical admissions, outpatients and beds from August 2000 to July 2001 are shown in Table 2.

Department of Surgery's network of hospitals

<i>Hospital</i>	<i>Address</i>
Queen Mary Hospital	102 Pokfulam Road, Pokfulam, Hong Kong
Tung Wah Hospital	12 Po Yan Street, Sheung Wan, Hong Kong
Grantham Hospital	125 Wong Chuk Hang Road, Aberdeen, Hong Kong
Kwong Wah Hospital	25 Waterloo Road, Kowloon, Hong Kong

Table 1

Surgical admissions, outpatients, and beds (August 2000 to July 2001)

<i>Network Hospital</i>	<i>Surgical Admissions</i>	<i>Surgical Outpatients</i>	<i>Surgical Beds</i>
Queen Mary Hospital	19,666	101,828	359
Tung Wah Hospital	12,035	7,699	223
Grantham Hospital	1,709	4,056	88
Kwong Wah Hospital	19,720	49,566	274
Total	53,130	163,149	944

Table 2

QUEEN MARY HOSPITAL

Erected more than 65 years ago, Queen Mary Hospital (QMH) is one of the largest public hospitals in Hong Kong. Situated on Hong Kong Island and serving its 1.37 million inhabitants, QMH is also a tertiary and quater-

nary referral centre for many specialties from all over the territory. Although the proper title of this venerable institution is now "University of Hong Kong Medical Centre", old habits die hard, and it will for the time being also be known as "Queen Mary Hospital".

The Department of Surgery currently occupies 15 wards and 359 beds. Ward allocation is on a Division basis, which allows autonomous teams to function with their own medical, nursing, administrative and secretarial staff.

Extensive refurbishment throughout the hospital complex has taken place over the past few years and continues to this day. The K Block was the first major extension project undertaken at QMH while the S Block is the latest undertaking to be completed, and now houses the Specialist Out-patient Clinic of the



Main Block, Queen Mary Hospital, in 2002

Department as well as those of other clinical specialties.

The results of these renovations to date have included the complete transformation of the Main Block into an impressive structure that occupies a central position within the hospital

complex. The central administrative offices of the Department of Surgery in Professorial Block have also been revamped, and now provide an aesthetically pleasing working environment for its staff.

TUNG WAH HOSPITAL



Senior staff of the Department of Surgery in 2002

Tung Wah Hospital (TWH) first started out in 1870 as a herbal clinic, where it also organised charity functions such as free distribution of food and clothing as well as free burial services. In 1978, and with the Centenary Building completed, the Department of Surgery first made use of the facilities in TWH to ease the problem of overcrowding in QMH. The bond between these two hospitals since that time has been cemented, and today, the two institutions complement each other on their surgically-related activities.

Tung Wah Hospital has 223 surgical beds for patients who are admitted directly as well as for convalescing surgical patients from QMH.

Over 6,000 major and minor procedures are performed annually in TWH. The operating theatres are well-equipped, including operating microscopes and the latest state-of-the-art laser technology. The establishment of a Special Care Unit (for surgical patients who require more attention), a Breast Centre, and a Geriatric Urology Centre in TWH has also benefited patients of the Department. A recent addition to the existing facilities in TWH is the Day Surgery Centre, which is one of the best purpose-built centres for ambulatory surgery in Hong Kong.



ABBI System located in the Breast Centre



Tung Wah Hospital, as it looked in 1902



Tung Wah Hospital complex, 2002

GRANTHAM HOSPITAL

The Division of Cardiothoracic Surgery at Grantham Hospital (GH) is the largest tertiary and quaternary referral centre in Hong Kong for patients of all ages with heart and lung diseases. Each year, the Division performs



Surgical staff of Grantham Hospital in 2002



The Grantham Hospital complex

around 800 open heart operations, 100 closed heart operations, and 400 thoracic operations. Approximately 60% of cardiac operations are for acquired heart diseases with the rest

being for congenital heart diseases.

The Division organises regular cardiac conferences so that cardiologists from various hospitals in Hong Kong have the opportunity to present their cases for consideration for cardiac surgery.

The Division is the only designated

paediatric cardiac surgical centre in Hong Kong. Complex paediatric cardiac procedures, such as arterial switch and Fontan operations, are routinely performed to correct or palliate challenging congenital heart defects. Over 90% of paediatric cardiac operations in Hong Kong are performed at GH – with results that are comparable with the best in the world.

With the advent of techniques and instrumentation in minimally invasive cardiac surgery, minimally invasive direct coronary artery bypass (MIDCAB) has been available in the hospital since 1996. More recently, the development and introduction of multi-vessel off-pump coronary artery bypass grafting (OPCABG) has provided an alternative to conventional CABG in carefully selected patients.

The Division is the only cardiac surgical centre in Hong Kong with the expertise and facilities to perform intrathoracic organ transplantation. The transplantation programme started in 1992 and the first heart transplantation was performed successfully that same year. Up to March 2001, the Division has performed 30 orthotopic heart transplantations, one heart-lung transplantation, two single-lung transplantations, and three double-lung transplantations, with very commendable results.

Members of the Division are also responsible for teaching undergraduate medical students. The teaching programme includes weekly lectures on cardiothoracic topics at Queen Mary Hospital as well as clinical tutorials at Grantham Hospital.

KWONG WAH HOSPITAL

STAFF

Andrew WC YIP MBBS, FRCS(Glasg), FRCS(Edin), FRACS, FACS, FCSHK, FHKAM(Surg), DCH(Ire)
Chief of Service

Team 1 (General & Vascular Surgery)

Ah Kian AHCHONG MBChB, FRCS(Eng), FRCS(Edin), FACS, FCSHK, FHKAM(Surg)
Consultant

Kyaw NYUNT MBBS, FRCS(Edin), FCSHK, FHKAM(Surg)
Senior Medical Officer

Kai Ming CHIU MBBS, FRCS(Edin), FCSHK, FHKAM(Surg)
Senior Medical Officer

Maket WC WONG MBChB, FRCS(Edin), FCSHK
Medical Officer

Team 2 (Urology)

In Chak LAW MBBS, FRCS(Edin), FCSHK,
FHKAM(Surg), MHA(UNSW), Dip. Urology(London)
Consultant

Siu Fai LO MBBS, FRCS(Edin), FCSHK,
FHKAM(Surg)
Senior Medical Officer

Lok Sang LEUNG LMCHK, FRCS(Edin), FCSHK
Senior Medical Officer

Joseph HUI MBBS, FRCS(Edin), FCSHK
Medical Officer

Team 3 (General, Breast & Upper GI Surgery)

Miranda CM CHAN MBBS, FRCS(Edin), FACS,
FCSHK, FHKAM(Surg)
Consultant

Chi Kin CHUNG MBChB, FRCS(Edin), FCSHK,
FHKAM(Surg)
Medical Officer

Yvonne LAU MBBS, FRCS(Edin), FCSHK,
FHKAM(Surg)
Consultant (up to Nov 2000)

Marcus WL YING MBBS, FRCS(Edin), FCSHK
Medical Officer

Wai Ka HUNG MBBS, FRCS(Edin), FCSHK,
FHKAM(Surg)
Senior Medical Officer

Billy YK LAM MBBS
Medical Officer

Team 4 (General & Hepatobiliary Surgery)

Kin Wah FUNG MBBS, FRCS(Edin), FCSHK,
FHKAM(Surg)
Consultant (up to March 2001)

Patrick YY LAU MBBS, FRCS(Edin), FCSHK
Medical Officer

William CS MENG MBChB, FRCS(Edin), FCSHK,
FHKAM(Surg)
Senior Medical Officer

Tak Wai CHOW MBBS
Medical Officer

Yuk Pang YEUNG MBBS, FRCS(Edin), FCSHK,
FHKAM(Surg)
Associate Consultant

Vicky KM LI MBBS
Medical Officer

Team 5 (Head and Neck & Plastic Surgery)

Chiu Ming HO MBBS, MS, FRCS(Edin), FRACS,
FACS, FCSHK, FHKAM(Surg)
Consultant

Ming Shiaw CHENG MBBS, FRCS(Edin), FCSHK
Medical Officer

Wing Yung CHEUNG MBBS, FRCS(Edin),
FCSHK, FHKAM(Surg)
Senior Medical Officer

Anna WM WONG MBBS, FRCS(Edin), FCSHK
Medical Officer

ACTIVITIES AND SERVICES

The Department of Surgery, Kwong Wah Hospital has 260 surgical beds, and although the cluster drainage population numbers only half a million, over half of our patients actually

reside outside the cluster. The Department has an annual admission of around 14,000 patients and the in-patient bed occupancy rate is 90%. The Tsui Tsin Tong Outpatient Department was opened in 2000. A total of 52,500 patients,



Kwong Wah Hospital facing Waterloo Road

of which 9700 were new cases, were seen at the Outpatient Department.

There are five teams in the Department: General & Vascular Surgery; Urology; General, Breast & Upper GI Surgery; General & Hepatobiliary Surgery; and Head and Neck & Plastic Surgery.

Operative procedures carried out by the Department cover a wide spectrum: 9,800 operations are performed every year, of which 38% are performed as an emergency. One-quarter of all operations were major while 61% were classified as minor. Over 20% of elective operations performed under general anaesthesia were done as day surgery. A purpose-built Day Surgery Center, which opened in 2001, is located on the 5th floor of the Tsui Tsin Tong Specialist OPD.

The Department, together with others, share the facilities provided by the Louey Choy Kwan Lok Endoscopy Center, and provide a comprehensive elective endoscopic service.

STRENGTHS AND DEVELOPMENTS

Vascular Surgery

In the presence of an aging population and changing dietary and smoking habits similar to those in Western societies, atherosclerotic arterial disease and its complications are becoming more important in our community. Under the leadership of Dr. AK AhChong, the Division provides a comprehensive vascular surgery service. This has also been made possible by the establishment of the Cheung Tze Kwan Vascular Center, where the latest state-of-the-art non-invasive vascular physiology tests can be performed.

Urology

Dr. IC Law heads the urology service. In addition to providing a general urology service, the service is one of the pioneers in establishing a male erectile dysfunction clinic in Hong Kong. The Urology team actively participates in multi-centre trials and has reported its experience with Viagra for the treatment of erectile dysfunction.

In 2001, the service was further enhanced by

the establishment of the Mr. and Mrs. Lai Kwok Wing-Urology Center.

Breast Surgery

The Breast Center, opened on 28 May 1996, was established through the generous donation of the Sir Murray MacLehose Trust Fund. It also serves as the office of the Yin Chun Club – the patient support group for breast cancer survivors.

The Breast Center has three consultation rooms equipped with ultrasound machines, a large waiting area, interview rooms, as well as diagnostic and interventional mammography facilities. Through subsequent donations by the Hong Kong Jockey Club, the Center also benefits from sophisticated equipment such as the prone table, digital stereotactic workstation and mammotome biopsy instrument.

Through the dedication and cooperation of our staff, we aim to provide holistic quality care to patients with breast cancer.

Plastic Surgery

Kwong Wah Hospital is one of the five accredited training centres for higher surgical training in Plastic Surgery in Hong Kong. The Division provides a wide spectrum of plastic surgery services, with a special interest in head and neck surgery, breast reconstruction, burns and treatment of congenital abnormalities.



Surgical staff of KWH with Visiting Professor NS Williams in 1998



Departmental Administration and Activities

DEPARTMENT ADMINISTRATION

The Head of Department is accountable for the operations of the whole Department. The re-organisation of Hong Kong's 38 public hospitals by the Hospital Authority, in 1991, resulted in the creation of the following managerial ranks:



*Professor John Wong,
Head and Chief of Service*

- Chief of Service – to oversee clinical services and administration.
- Department Operations Manager – to be responsible for nursing administration as well as general running of the wards.

In 1993, Professor John Wong was appointed as Chief of Service (Surgery) of Queen Mary Hospital in addition to his existing responsibilities as Head of Department of Surgery. The organisational structure of the Department is shown in the Figure.

At divisional level, autonomy is given to each Division to care for its own patients with respect to clinical activities such as surgical procedures, outpatient clinics, and medical records. Each Division also manages its own staff training, student teaching, scholarly



Mrs. Barbara Ng, Secretary to Professor John Wong

publications, as well as the procurement of equipment and consumables.

At department level, a Senior Staff Meeting is held every week for the dual purpose of deliberating on matters that concern the Department as a whole, and to disseminate information. These include aspects of clinical management, staff and personnel, teaching and research, administration and new developments. Exchange of opinions and suggestions are presented at these meetings.



*Miss Elaine Chan,
Administration Manager*

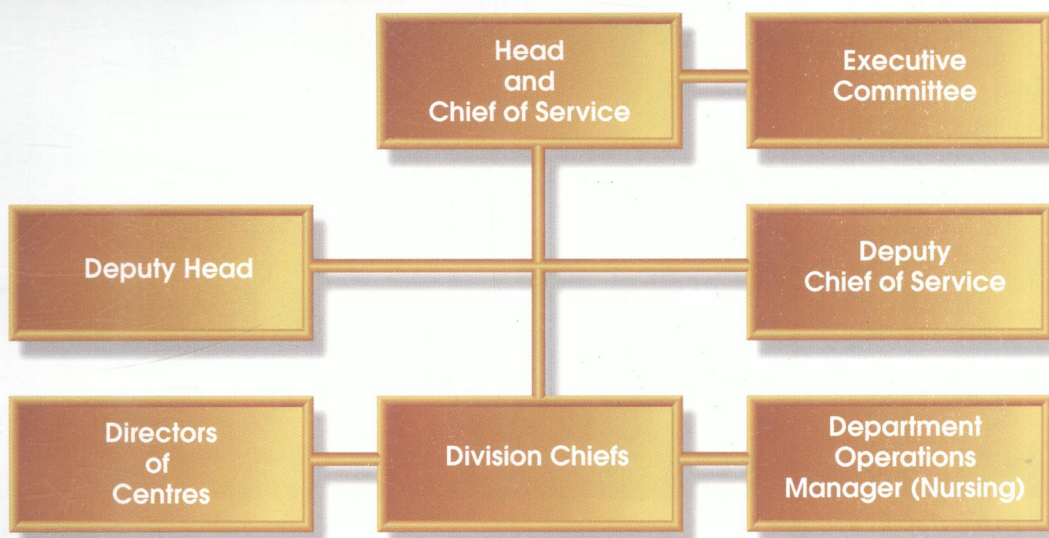


Figure 1 Organisational structure of the Department

In order to distribute the workload of the Department more efficiently and evenly among its staff, committees have been established which also include nursing staff and non-clinical administrative staff (Table). The Chairmen of these committees update the Department with reports biannually, or whenever the need arises.

Committees of the Department

Committee	Chairman
Budget and Finance	Dr. PC Tam
Clinical Services	Dr. PC Tam
Drugs, Consumables and Equipment	Dr. LK Lam
General Services	Dr. C Yeung
New Developments	Dr. KW Chu
Publicity	Professor CM Lo
Research	Professor P Tam
Staff and Personnel	Professor SWK Cheng
Visitors	Dr. LWC Chow
Welfare	Dr. KL Chan

Table

Through a Department Committee (Surgery), a close liaison exists between medical and nursing staff and the hospital administration. This Committee serves to provide a forum for the discussion and planning of many of the Department's patient-care activities at hospital and ward level. Members of the Committee include senior staff of the Department and Chiefs of Service from our network hospitals, as well as senior hospital administrators and senior nursing staff from various specialties and units.



Some of the support staff of the Department



Administrators of the Department in 2002

DEPARTMENT ACTIVITIES

The title and content of the regular activities of the Department have not changed significantly since the 1997 edition of the Prospectus.

Senior Staff Meeting

The weekly Senior Staff Meeting, chaired by Professor Wong in his capacity as Chief of Service, is held in the refurbished GB Ong Library, and is attended by Division Chiefs and other senior staff as well as members for



The refurbished GB Ong Library, venue for Senior Staff Meetings and Academic Staff Meetings

the Centre for Education & Training, and administrators. The agenda of this meeting include, among others, policy decisions, budget reports, committee reports, staff assessments, and teaching-related issues.

Academic Staff Meeting

This monthly meeting is chaired by Professor Wong in his capacity as Head of Department, and is attended by all academic staff of the Department. The agenda is focussed on teaching, research and academic development.

Research Meeting, Journal Review and X-ray Session

On a rotational basis, these presentations are held in the 5th Floor Lecture Theatre, Professorial Block, and are attended by staff and students of the Department. Research Meetings provide a platform for staff to present their research results while Journal Reviews offer an opportunity for residents to give a comprehensive literature review on a selected topic. For the X-ray sessions, different Divisions present X-ray findings with expert opinions given by radiologists.

Grand Round, Service Round and Surgical Pathology Meeting

These meetings are also held on a rotational basis. Grand Rounds continue to be a valuable exercise for both staff and students. A particular patient is presented by one Division, with comments and discussions provided by other staff members. Colleagues from other disciplines such as Radiology, Pathology and

Microbiology are also invited to offer their expertise. Grand Rounds are conducted in an interactive manner and serve as an important aspect of continuing medical education in surgery. Service Rounds, in the ward setting or as case scenarios, are also valuable learning opportunities.

The monthly Surgical Pathology Meeting is a joint meeting of pathologists and surgical staff of the Department on interesting or difficult histopathology diagnoses and post-mortem findings.

Morbidity and Mortality Meeting

The Morbidity and Mortality Meeting, chaired by Professor William Wei, is one of the most important meetings of the Department, and is an audit of the quality of patient care in the Department of Surgery. All Divisions of the Department document and, where necessary, explain any of the in-hospital mortality and/or complications.



A Journal Review in progress



Division of Breast Surgery

STAFF



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Louis Wing Cheong CHOW MBBS, MS, FRCS(Glasg), FCSHK, FHKAM(Surg)

Associate Professor

Division Chief

Ava KWONG BSc, MBBS, MRCS(Edin)

Medical Officer

Lai Ngor WONG RN, RM, PGD(Advanced Nursing), BSc(Nursing),

Cert(Oncology Nursing), Cert(Breast Cancer Nursing)

Breast Nurse Specialist

Mun Yee CHUNG RN, BS(Nur Stud)

Registered Nurse

Kit Ching HO EN

Enrolled Nurse

Tjing Yung Wings LOO BM, MSc

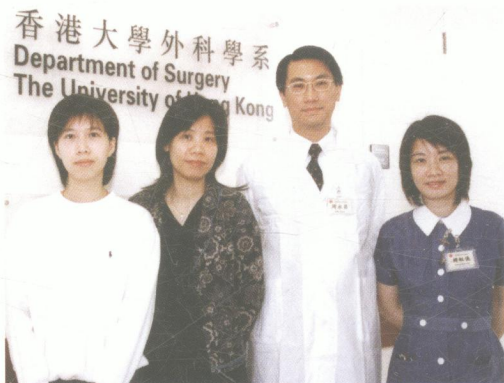
Research Assistant

ACTIVITIES AND SERVICES

The Division of Breast Surgery is dedicated to providing the highest standards of clinical care for patients with breast diseases in

Hong Kong and the Asia-Pacific region. Complementary to offering comprehensive services to patients, the Division also places strong emphasis on research. We believe that clinical service can only be improved through continual research and development.

Located at both QMH and TWH, the Division provides in- and out-patient services for patients with benign and malignant breast lesions. In 2001, a Breast Centre was opened in TWH to serve patients with uncertain diagnoses on mammograms as well as those undergoing active treatment for breast cancer.



Dr. Chow with nurses of the Division

The incidence of breast cancer in Hong Kong has increased by 40% during the past decade, overtaking lung cancer in 1994 as the leading cancer among women. The age-standardised rate of breast cancer is 40 per 100,000, but its incidence among younger women has risen dramatically (Figure 1).

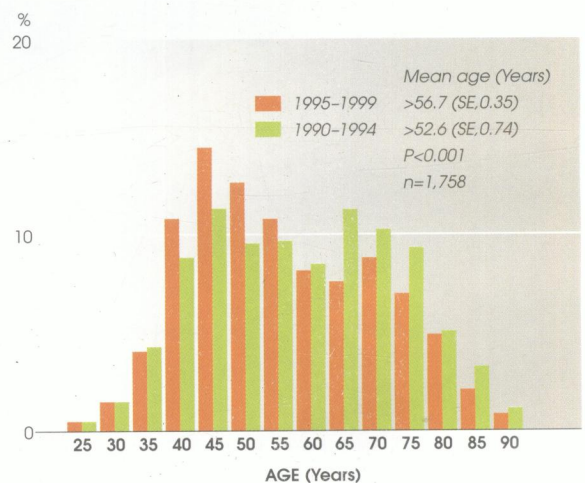


Figure 1 Age of breast cancer patients at presentation

The number of patients attending our service is increasing every year (Figure 2). The types of operations for benign conditions are shown in Figure 3. For patients with benign conditions and who want an operation, we also provide day surgery so they can be discharged on the same day. The number of patients who used the Day Surgery Service increased from 33% in 1999 to 36% in 2000.

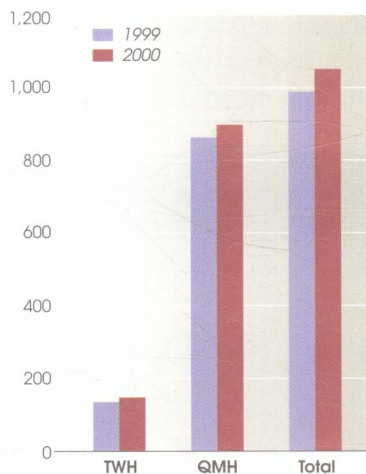


Figure 2
Number of new cases seen by the Division

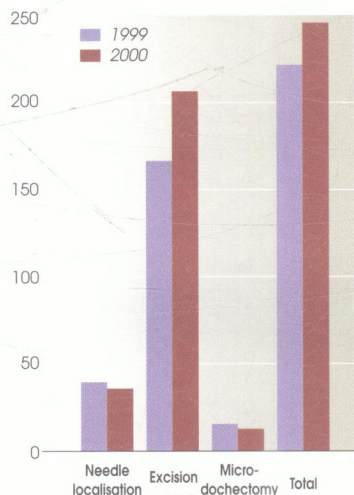
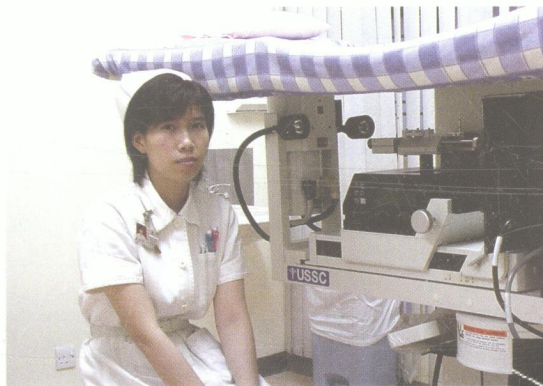


Figure 3
Operations for benign conditions

STRENGTHS AND DEVELOPMENTS

The most common breast cancers are invasive ductal cancers (78%), followed by invasive lobular cancers. Although T4 lesions are still encountered, the most common (over 60%) cancers on presentation are T2 lesions (Figure 4). Greater patient awareness and the rise in screening have seen an increased proportion of patients who present with T1 lesions. Most T1 lesions are impalpable and, in the past, could only be confirmed by needle

localisation procedures. However, the recent acquisition by the Division of the Advanced Breast Biopsy Instrument (ABBI) has converted this in-patient, general anaesthetic procedure to an out-patient local anaesthetic procedure. The



Ms KC Ho with the ABBI

ABBI makes use of its stereotactic capabilities to target an impalpable lesion radiologically. The targeted lesion can then be removed enbloc using the instrument's biopsy device.



A piece of tissue removed after the procedure

We have also acquired a gamma-probe to perform sentinel lymph node biopsies. Normally, for both modified radical mastectomy and breast conservation therapy, which are the most commonly performed operations for palpable but early cancer lesions, axillary dissection would be carried out for staging purposes (Figure 5). Currently, there is much debate on the indications for this procedure. Sentinel lymph node biopsy offers an attractive alternative, without the morbidity of lymphoedema and other complications associated with axillary dissection. We have completed a validation study of the gamma-probe biopsy instrument, and found a false negative rate of just

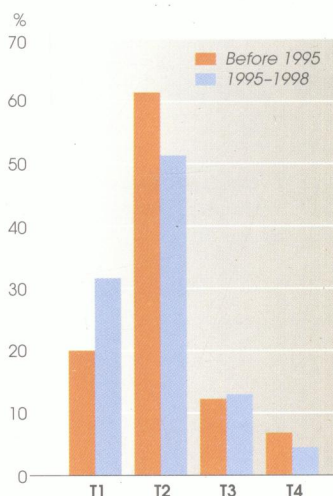


Figure 4
Breast cancer and T-staging

2%. Yet, despite the improved techniques for staging offered by the gamma-probe, the overall survival rates for patients after modified radical mastectomy and breast conservation therapy are not statistically different.

Prognosis for locally advanced breast cancer (LABC) is poor. The five-year survival after a radical mastectomy varies from 10% to 40% while the ten-year survival varies from 0% to 30%. Results of radiotherapy alone

are also poor, with five-year survival varying from 10% to 30%. The introduction of combined systemic chemotherapy and surgery for patients with LABC has shown promise (Figure 6). A clinical study of 173 Chinese patients with LABC, treated with either neoadjuvant chemotherapy (NCT, n=38) or postoperative adjuvant chemotherapy (PACT, n=135) was performed by our Division. The

NCT group received either FEC or adriamycin while the PACT group received CMF only. The overall five-year probability of survival for both

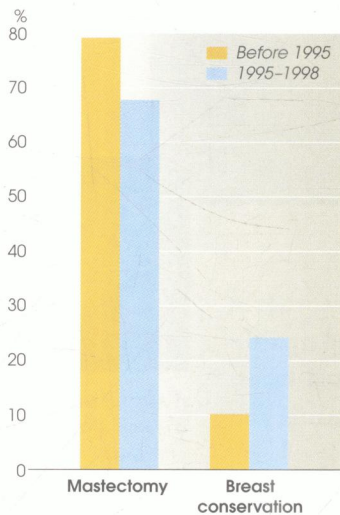


Figure 5
Surgical treatment of breast cancer

groups was 0.44. These results demonstrate that NCT combined with surgery are as effective as PACT and surgery for Chinese women. Neoadjuvant chemotherapy has the advantages of treating the micrometastasis, rendering the inoperable tumour operable, making breast conservation surgery possible, and allowing objective assessment of responses to chemotherapeutic agents. Nevertheless, clinical research has also shown that it is the axillary nodal status that determines the final outcome.

RESEARCH

The Division actively participates in basic research with clinical applications. One area of focus has been the development of a histoculture



Dr. Chow with research team of the Division

drug response assay for the management of patients with breast cancer. The technique was adapted from AntiCancer Inc., San Diego. Breast cancer tissue was treated with different cytotoxic drugs, and the response measured by ATP assay (Figures 7a + b).

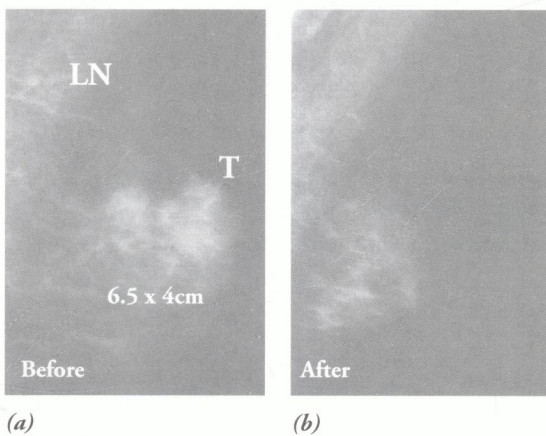
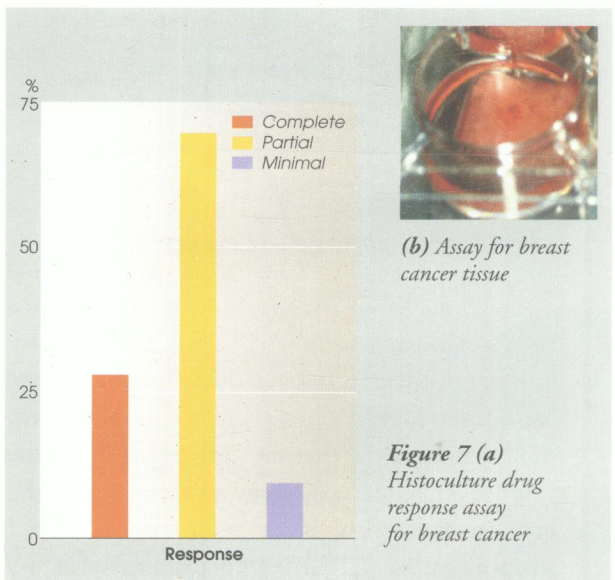


Figure 6
Mammographic appearance of a locally advanced breast cancer (a) before and (b) after neoadjuvant treatment based on results of histoculture drug response assay



(b) Assay for breast cancer tissue

Figure 7 (a)
Histoculture drug response assay for breast cancer

Prognostic determination for breast cancer is important. The Division has made progress in the application of RT-PCR technology for detecting circulating breast cancer cells in the blood. Assays targeted at CK-19, CK 20 and b-HCG are useful for this purpose, especially when used in combination. We have also evaluated the impact of fine needle aspiration (FNA), and operations on the shedding of breast cells into the peripheral blood. Up to 14% of patients were converted from negative to positive status after FNA, rising to approximately 20% on postoperative day 1.

Other research interests of the Division include the development of a model to study postoperative inflammatory response, where a significant elevation of temperature, respiratory rate has been observed, pulse rate, leucocyte count, c-reactive protein and erythrocyte sedimentation rate. The addition of a macrolide-like clarithromycin can modulate some of these parameters, which translates into an improved clinical outcome. Further work and clinical trials are underway to evaluate other immunomodulating agents.

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Comparison of tamoxifen with danazol in the management of idiopathic gynecomastia. *Am Surg* 2000;66:38-40.
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Detection of circulating breast cancer cells with multiple-marker RT-PCR assay. *Anticancer Res* 2001;21:421-4.
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Comparison of tamoxifen with danazol in the management of idiopathic gynecomastia. *Am Surg* 2000;66:38-40.



Division of Cardiothoracic Surgery

STAFF



Dr. Shui Wah CHIU

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Wing Hung CHUI MBBS, FRCS(Edin), FCSHK, FHKAM(Surg)

Medical Officer

ACTIVITIES AND SERVICES

The Division of Cardiothoracic Surgery at Grantham Hospital is the largest tertiary referral centre for patients with heart and lung diseases in Hong Kong. The Division provides adult cardiac surgery, paediatric cardiac surgery and thoracic surgery and performs about 700 open heart operations, 100 closed heart operations and 400 thoracic operations per year. Approximately 60% of cardiac operations are for acquired heart diseases and the remainder being for congenital heart diseases. Our patients range in age from premature babies to the very elderly.

As the Division is the only supra-regional cardiac surgical centre in Hong Kong, it receives and welcomes referrals of both elective and emergency cases from all public and private hospitals in Hong Kong. Regular conferences

on cardiac surgery provide cardiologists in Hong Kong with the opportunity to present cases. Those considered appropriate are scheduled for cardiac operations by the Division.

Staff of the Division are also responsible for teaching undergraduate medical students of The University of Hong Kong. The teaching programme includes a weekly lecture on cardiothoracic topics at Queen Mary Hospital, and clinical tutorials at Grantham Hospital.

STRENGTHS AND DEVELOPMENTS

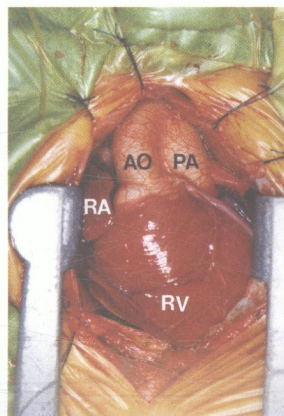
The Division is the only designated paediatric cardiac surgical centre in Hong Kong. Over 90% of paediatric cardiac operations in Hong Kong are performed at Grantham Hospital. The surgical management of congenital heart diseases presents fascinating

and complex challenges to cardiac surgeons. Paediatric cardiac procedures, such as arterial switch and Fontan operations, are routinely performed to correct or palliate complex congenital heart defects. Our hospital mortality of simple transposition of great arteries in arterial switch operations is just 6%. Overall, an annual mortality rate of below 5% (the world standard for paediatric cardiac centres) has been achieved by the Division.

In 1996, with the advent of new techniques and instrumentation in minimally invasive cardiac surgery, the Division started to perform minimally invasive direct coronary artery bypass (MIDCAB). More recently, multi-vessel off pump coronary artery bypass grafting (OPCABG) has also been performed by the Division. The number of OPCABGs is steadily increasing and becoming the alternative to conventional CABG for well-selected patients.

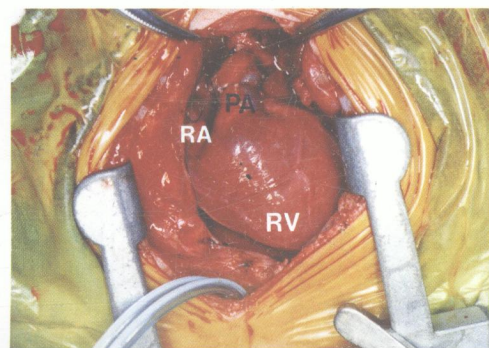
The Division is also the only cardiac surgical centre in Hong Kong to provide intrathoracic organ transplantation. The transplantation programme started in 1992 with the first heart transplantation performed successfully in the same year. Up to March 2001, we have performed 30 orthotopic heart, 1 heart-lung, 2

single-lung and 3 double-lung transplantations. Seven out of the 30 recipients (23%) of the orthotopic heart transplantation received inotropic therapy as in-hospital patients before transplantation. These included two patients who received multiple intravenous inotropic agents as well as an intra-aortic balloon pump. In March 2001, 25 heart transplant recipients were still alive and in New York Heart



(a)

Arterial switch repair for transposition of great arteries (a) before operation (b) after operation



(b)

Association (NYHA) functional class I or II. It is hoped that more transplantation operations can be performed in the near future, when the concept of 'organ donation' is better accepted by the general population.

Since 1997, two members of the Division have received additional training in the United Kingdom. Dr WK Au spent 11 months in Glasgow, Scotland at the Departments of Cardiac Surgery of the Glasgow Royal Infirmary and the Glasgow Western Infirmary. Dr WH Chui had a similar 11 month stint at the Departments of Cardiac Surgery of the Oxford Heart Centre, John Radcliffe Hospital and the Royal Brompton Hospital, National Heart and Lung Institute, Imperial College School of Medicine, University of London.



Dr. SW Chiu and team in operating theatre

RESEARCH

The Division of Cardiothoracic Surgery has a number of clinical research areas, and is actively involved in research as outlined in Table 1.

CURRENT RESEARCH INTERESTS IN CARDIOTHORACIC SURGERY

Coronary artery bypass grafting

Further development of arterial graft (e.g. radial artery)

Minimally invasive cardiac surgery

Off pump coronary artery bypass grafting

Heart valve surgery

- Long-term results of valvular replacement using biological and mechanical prostheses
- Long-term results of mitral valve repair
- Optimization of anticoagulant levels in Chinese patients

Systemic organ dysfunction after cardiopulmonary bypass in open heart surgery

- Cognitive dysfunction
- Pulmonary dysfunction
- Renal dysfunction

Surgery for congenital heart diseases

- Long-term results of arterial switch operation for transposition of great arteries
- Long-term outcomes of surgical repair for Tetralogy of Fallot in adults
- Factors influencing long-term survival in Fontan operation

Preoperative risk stratification and its comparison with the surgical outcome for major cardiac operations

Oncogene study for primary lung cancer in female patients undergoing curative lung resection

Endo-tracheal and endo-bronchial stenting for benign and malignant airway obstructions

Thymoma – influence of Muller-Hermelink classification on the long-term survival

Treatment of spontaneous pneumothorax with VATS advaseal pleurodesis vs VATS staple-blebectomy pleurodesis

Quality of life in patients following congenital heart surgical repair

Table 1

TEN REPRESENTATIVE PUBLICATIONS OF THE DIVISION

- **Cheng LC, Sham JST, Chiu CSW, Fu KH, Lee JWT, Mok CK.**
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Aust NZ J Surg 1996;66:71-3.
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Angiology 1998;49(10):789-800.
- **Au WK, Chiu SW, Mok CK, Lee WT, Cheung D, He GW.**
Repair of ruptured sinus of valsalva aneurysm: determinants of long term survival.
Ann Thorac Surg 1998;66:1604-10.
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Post-banding pulmonary artery pseudoaneurysms. *Asian Cardiovasc Thorac Ann* 1998;6:68-71.
- **Cheng LC, Chiu CSW, Lee JWT.**
Left ventricular rupture after mitral valve replacement. *J Cardiovasc Surg* 1999;40:339-42.
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Analysis of indications for surgical closure of subarterial ventricular septal defect without associated aortic cusp prolapse and aortic regurgitation. *Am J Cardiol* 2001;87:1266-70.
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Coronary artery fistulas: long term results of surgical correction.
Ann Thorac Surg 2001;71(1):190-5.
- **Fan K, Lee K, Chiu SW, Lee JWT, He GW, Cheung D, Sun MP, Lau CP.**
Effects of bilateral pacing in prevention of postoperative atrial fibrillation after coronary artery bypass surgery. *Circulation* 2000;15:755-60.
- **Chui WH, Chiu SW, Lee JWT, Cheung DLC, He GW.**
Surgical management of blunt traumatic rupture of the descending thoracic aorta.
Ann Thorac Cardiovascular Surg 1999;5(2):109-12.



Division of Colorectal Surgery

STAFF



Dr. Kin Wah CHU

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Honorary Clinical Associate Professor
Division Chief



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Honorary Clinical Associate Professor



Dr. Wai Lun LAW

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Medical Officer

Hok Kwok CHOI MBBS, FRCS(Edin), FCSHK, FHKAM(Surg)
Medical Officer

ACTIVITIES AND SERVICES

The Division of Colorectal Surgery is responsible for the management of patients with benign or malignant diseases of the colon, rectum, anus, small intestine and appendix. With its 42 hospital beds in QMH, and 20 beds in TWH, the Division manages over 3000 hospital admissions each year. Four sessions of Outpatient Clinic are held weekly in QMH, which amounts to over 10,000 outpatient visits to the Division annually (Table).



Division members (left to right), Dr. PHM Tung, Dr. JWC Ho, Dr. KW Chu, Dr. WL Law, Dr. HK Choi

STRENGTHS AND DEVELOPMENTS

Colorectal Cancer

Colorectal cancer is the second most common cancer and the third leading cause of cancer death in Hong Kong. Each year, the Division manages more than 250 new cases of primary colorectal cancers.



Dr. KW Chu and team at work

The Division adopts total mesorectal resection for mid- and low-rectal cancer. Since October 1993, over 450 patients have undergone resection of cancers in mid- and lower-rectum. The sphincter saving rate is 86.3% for all cancers located within

Clinics and Operating Sessions run by the Division

<i>Clinic</i>	<i>Time</i>	
Colorectal Clinic, S4, QMH	Monday:	09:30 – 12:30
	Wednesday:	09:30 – 12:30
		14:00 – 16:30
	Friday:	14:00 – 16:30
Colorectal Clinic for Civil Servants and Hospital Authority Staff Block S8, QMH		14:00 – 16:00 Dr. KW Chu (1st Wednesday of each month)
Colorectal Clinic for Private Patients Room 201, Professorial Block, QMH	Monday:	14:00 – 16:30 Dr. KW Chu
	Saturday:	09:45 – 11:00 Dr. Judy WC Ho
Operating day	Monday:	TWH
	Tuesday:	QMH
	Thursday:	QMH
	Friday (a.m.):	QMH
Endoscopy sessions	Monday (p.m.)	
	Tuesday (p.m.)	
	Wednesday	
	Thursday (p.m.)	

Table

12cm from the anal verge. Since 1998, abdominoperineal resection has not been performed for cancers more than 4cm from the anal verge. The local recurrence rate for patients with low anterior resection been maintained at around 7%.

Being a tertiary referral centre, patients with advanced or recurrent colorectal cancers are referred to the Division for management. These patients are usually managed with a multi-modality approach. Preoperative chemoradiotherapy as well as postoperative chemotherapy and radiotherapy are employed in addition to surgery if necessary. Ultra-major resections such as abdominosacral resection, peritonectomy and exenterative surgery are performed regularly — with low mortality and morbidity.

As increasing evidence shows that laparoscopic surgery does not compromise cancer clearance or oncological outcome of patients with colorectal cancer, more laparoscopic colorectal resections are being performed. Since 2000, over 150 laparoscopic colectomies have been performed for patients with colorectal cancer. The early results are encouraging. In addition, active clinical and basic research in this field are underway.

The Division has also developed an interest and expertise in anal sphincter reconstruction.

In 1999, the Division performed the first dynamic graciloplasty in Hong Kong. Since then, three more patients have undergone this operation after sphincter ablation surgery or severe anal sphincter injury.

Patients also receive postoperative follow-up care and surveillance from the Division. The establishment of the Hereditary Colorectal Cancer Registry has also helped to screen and provide counseling to high-risk individuals.

Inflammatory Bowel Disease

The incidence of inflammatory bowel disease (IBD) is much lower in Hong Kong compared with Western countries. Consequently, most local doctors are not so familiar with the management of IBD. The Division works closely with gastroenterologists in the management of these patients. Each year, approximately ten patients with ulcerative colitis or Crohn's disease undergo surgical resection. Restorative proctocolectomy is the treatment of choice for patients with chronic ulcerative colitis.

Anorectal Surgery

In addition to out-patient procedures for anorectal disease, the majority of in-patient and day-patient anorectal surgery are performed in TWH. Haemorrhoids, anorectal fistulae, and

anal fissures are the most common anorectal diseases encountered by the Division. With the



Stapled haemorrhoidectomy

availability of transrectal ultrasound and anorectal physiology, anorectal disease such as complicated fistulae, rectal prolapse and faecal incontinence can now be objectively investigated.

We are also the first in Hong Kong to perform stapled haemorrhoidectomy, which is now the Division's preferred mode of surgical haemorrhoidectomy in an ambulatory setting.

Laparoscopic Surgery



A fully mobilised colon being delivered via a small suprapubic incision in readiness for ileorectal anastomosis

The development of laparoscopic colorectal surgery has been rapid. With three laparoscopic colorectal surgeons, the Division can perform most colorectal surgery laparoscopically. Advanced surgical procedures such as abdominoperineal resection, low anterior resection with total mesorectal excision, and proctocolectomy are now

regularly performed. Our early results show quicker patient recovery and greater patient satisfaction.

Endoscopy and Stenting

The Division performs over 1,500 colonoscopies and 2,000 sigmoidoscopies each year. In addition to the diagnostic procedures, therapeutic procedures such as colonoscopic polypectomies and insertion of metallic stents are regularly performed. Since 1997, over 50 self-expanding metallic stent insertions have been performed in patients with advanced malignant colorectal obstruction. Palliative colostomy was spared in most of these patients.

Anorectal Physiology

The anorectal physiology laboratory was established in 1995 with the aim to provide objective investigations for patients with

functional bowel disorders. These investigations include:

- Colonic transit study
- Transrectal ultrasound
- Anal manometry
- Pudendal nerve conduction test
- Electromyography
- Defecography

With the introduction of anorectal physiology investigation, functional bowel disorders such as constipation and faecal incontinence can be more accurately evaluated. Transrectal ultrasound helps in the accurate staging of patients with rectal tumour. This then allows the most appropriate treatment to be offered.

Intestinal Obstruction

Adhesive obstruction is the most common aetiology of benign small bowel obstruction. Through active research, a treatment protocol for intestinal obstruction has been developed by the Division.

Obstructing colorectal cancers are the most common cause of colonic obstruction. One-table lavage and one-stage operation for left-sided obstruction were first performed in the late 1980s, and over the past decade, more than 150 patients have been treated with this procedure. Preoperative decompression of acute obstruction by self-expanding metallic stent is performed regularly in poor-risk patients to improve their surgical outcome.



Dr. KW Chu performing a colonoscopy

HEREDITARY GASTROINTESTINAL CANCER REGISTRY

In 1995, the Division established the territory's first Hereditary Colorectal Cancer Registry. This is the first such registry in Hong Kong and China. The aim of the Registry is to achieve secondary colorectal cancer prevention in high-risk families through early detection, timely treatment, education and ongoing research. Our scope of work includes:

- Organising screening for at-risk family members using a combination of clinical and genetic methods
- Providing genetic service, including formulating and updating of pedigrees of affected members as well as genetic counseling
- Educating the medical profession and public about hereditary colorectal cancer to ensure proper referral and adherence to a screening programme
- Conducting clinical and laboratory research on hereditary colorectal cancer
- Establishing international collaboration for conducting of multicentre trials

Our Registry serves families that satisfy the following criteria:

- A) Affected by histologically-proven familial adenomatous polyposis (FAP). These include index patients and at risk first-degree relatives over the age of 12 years
- B) Affected by hereditary non-polyposis colorectal cancer (HNPCC) satisfying Amsterdam criteria or upon identification of mismatch repair gene mutation, including index patients and at risk first-degree relatives over the age of 25 years
- C) Two first-degree family members including index patients and at risk first-degree relatives who are ≤ 5 years younger than the youngest age of those family members diagnosed with cancer with histologically-proven colorectal cancer:
 - i) One first-degree family member with histologically-proven colorectal cancer diagnosed before the age of 45 years
 - ii) One first-degree family member with histologically-proven colorectal cancer and another first-degree family member with histologically-proven HNPCC related cancers

Up to the end of 2001, we have enrolled 414 families (1,200 individuals), including 37 FAP families, 52 HNPCC families, 317 colorectal cancer families that satisfied criteria C, and 8 families with other rare polyposis syndromes. In addition, the Registry receives referrals from Hospital Authority-run hospitals and private doctors. In 2001, 319 screening/surveillance procedures were performed for recruited patients. Screening of asymptomatic family members detected 17 individuals with FAP; 20 individuals with colorectal polyps treated with polypectomy; two individuals with colorectal cancer; and one individual with ovarian cancer. There were 114 families that attended counseling sessions organised by the Registry.

By the end of 2001, we have successfully detected APC gene mutation in 23 FAP families, and HNPCC gene mutation in 37 HNPCC families. Genetic testing confirmed 123 individuals as carriers of the mutated gene. Regular surveillance programmes were organised for those affected. The tests also showed 91 individuals to carry the normal gene these patients were subsequently discharged from further clinical screening.

Two self-help groups: one for FAP families and one for HNPCC families, have been established with the aim of providing support for each other.

RESEARCH

The Division actively engages in both clinical and laboratory-based research. Current research interest includes:

- Colorectal Cancer
 - Total mesorectal excision for rectal cancer
 - Adjuvant therapy for colorectal cancer
 - Laparoscopic surgery for colorectal cancer
 - Bowel function after rectal cancer surgery
 - Hereditary colorectal cancer
- Screening for high risk families
- Cancer genetics
- Intestinal obstruction
- Prospective randomised trial on adhesive obstruction
- Prospective audit on intestinal obstruction
- Colonoscopy
- Colorectal polyps
- Bowel preparation for colonoscopy

COLLABORATIONS

Besides surgical treatment for colorectal cancer, the Division also takes an active part in adjuvant therapy. In cooperation with the Department of Clinical Oncology, preoperative chemoradiation for advanced rectal cancer and postoperative chemotherapy for colon and rectal cancers is now available for our patients.

COMMUNITY AND MEDIA RELATIONSHIP

The Division maintains a good relationship with the media by providing health education and medical advances in the subspecialty of colorectal surgery. The Division also contributes by participating in the patient education programmes of organisations such as the FAP Families and Stoma Association.

For further information regarding the Division or the HGCR, please contact:

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Hereditary Gastrointestinal Cancer Registry Co-ordinator

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Division of Endocrine Surgery

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Division Chief

Wai Fun CHAN MBBS, FRCS(Edin)

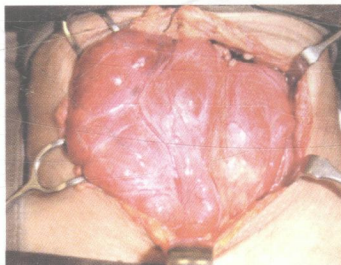
Medical Officer

ACTIVITIES AND SERVICES

The Division of Endocrine Surgery provides a stand-alone service with separate beds, a full-time staff and surgical residents. The service aims to provide a high standard of care to patients with the following endocrine diseases:

- Thyroid
- Parathyroid
- Adrenal
- Pancreatic endocrine disease

THYROID DISEASES/ THYROID CANCER



Emergency thyroidectomy for a huge goitre causing airway obstruction

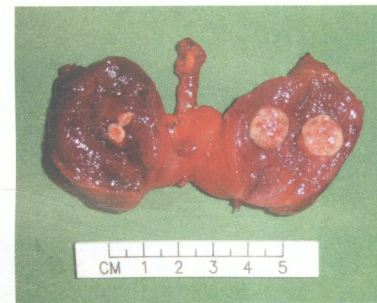
Nodular goitre is a common problem that prevails in our population. Each year, the Division receives more than 600 new patient referrals, and performs 150 to 200 thyroid-related operations. Table 1 shows the types and numbers of procedures performed by the Division between 1995 and 2000.

Procedures Performed (1995-2000)

Procedure (Thyroid Surgery, N = 937)	No.	%
Unilateral lobectomy	352	37
Total thyroidectomy	298	32
Subtotal thyroidectomy	127	14
Ipsilateral lobectomy + contralateral subtotal thyroidectomy	88	9
Completion thyroidectomy	72	8

Table 1

Fine needle aspiration cytology is frequently performed under ultrasound guidance. Thyroidectomy is performed for thyroid malignancy in about 16% of patients. Surgery for retrosternal goitre and thyroid re-operations accounts for 14% and 16%, respectively, of patients undergoing thyroid surgery. Surgical treatment for thyrotoxicosis is offered to selected patients. The incidence of permanent hypoparathyroidism and vocal cord palsy observed in our Division is 1.6% and 0.9%, respectively. Table 2 shows the indications for operation and pathology in patients who were operated on between 1995 and 2000.



Total thyroidectomy specimen showing multifocal medullary thyroid carcinoma in patient with MEN2A syndrome defined by genetic screening

Indications for Operation (1995-2000)

Indication	Number	%
Malignancy	149	16
Papillary carcinoma	110	
Follicular carcinoma	30	
Anaplastic carcinoma	4	
Medullary carcinoma	3	
Lymphoma of thyroid	2	
Nodular goitre	519	55
Grave's disease	152	16
Follicular adenoma	98	11
Others	19	2

Table 2

PARATHYROID DISEASE

Primary Hyperparathyroidism

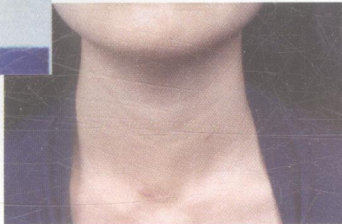
Hypercalcaemia due to primary hyperparathyroidism (HPT) is increasingly being diagnosed and referred for surgical treatment. On average, 20 cases of primary HPT are managed annually by our Division. Surgical treatment has been successful in 98% of patients with or without preoperative localisation. Re-operations for failed initial cervical exploration elsewhere account for 4% of patients who were treated in our Division. Endoscopic-assisted parathyroidectomy with intraoperative parathyroid hormone assay is performed for selected patients.



Endoscopic-assisted parathyroidectomy



Set-up for intraoperative parathyroid hormone assay



Clinical photograph taken 6 weeks after endoscopic-assisted parathyroidectomy

Secondary or Tertiary Hyperparathyroidism

Surgery for secondary and tertiary HPT is performed for 15%–20% of patients with renal failure who have biochemical evidence, radiological features or symptomatology related to HPT. Total parathyroidectomy with immediate autotransplantation of parathyroid gland to the forearm is the procedure of choice.

Parathyroid Cryopreservation

Routine cryopreservation of parathyroid tissue is performed for patients during parathyroid re-operations or for those with multiglandular hyperplasia. The tissue is stored in our parathyroid tissue bank for delayed autotransplantation in cases when patients develop permanent hypoparathyroidism.

Table 3 shows the number of operations performed for patients with parathyroid diseases between 1995 and 2000.

Number of Procedures Performed for Patients with Parathyroid Diseases (1995-2000)

Procedure	No.
Primary HPT	91
Secondary or tertiary HPT	57

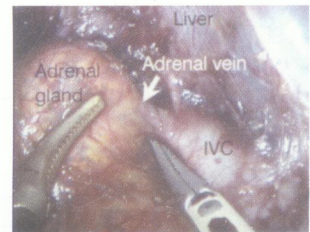
Table 3

ADRENAL DISEASE

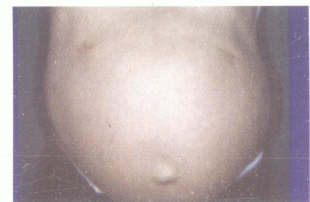
Adrenalectomy for various adrenal diseases is performed for patients referred from our endocrinologists. Investigations such as hormonal evaluations and preoperative localisation studies are performed in collaboration with specialists. Localisation tools, including CT scan, MRI, radioisotope scanning such as NP59 scan and MIBG scan, and venous sampling are frequently performed. Incidentally discovered adrenal masses are investigated according to a standard protocol. Functioning or suspected malignant tumours are subject to surgical treatment.

Laparoscopic Adrenalectomy

Adrenalectomy through laparoscopy is a new standard of treatment for the majority of patients requiring adrenalectomy. More than 70% of our patients have undergone this procedure with a success rate of 93%. This approach results in a shorter hospital stay, less wound pain, less analgesic requirement and a more rapid postoperative recovery compared with open approaches. Table 4 shows the number and indications for adrenal surgery for the period between 1995 and 2000.



Laparoscopic right adrenalectomy for Cushing adenoma



Clinical photograph taken 1 week after bilateral laparoscopic adrenalectomy for Cushing syndrome

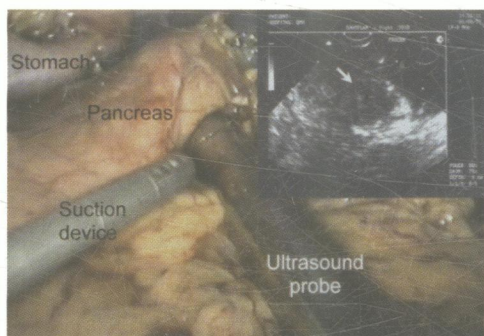
Adrenal Surgery Performed by the Division (1995-2000)

Indications	No.
Primary aldosteronism	35
Nonfunctioning tumour	12
Pheochromocytoma	8
Cushing syndrome	11

Table 4

PANCREATIC ENDOCRINE DISEASE

Insulinoma is the most common pancreatic endocrine disease. Preoperative localisation studies including CT scan, MRI, endoscopic ultrasound, and intra-arterial stimulated venous sampling are available. For patients found to have negative localisation, a combination of intraoperative localisation by



Laparoscopic ultrasonography before pancreatectomy

palpation and intraoperative ultrasound has achieved a high success rate in the surgical treatment of those with hyperinsulinaemia. Minimal invasive surgery by laparoscopic enucleation and distal resection, for selected patients, has been successfully performed.

Malignant pancreatic neuroendocrine tumour with liver metastasis is managed by transarterial embolisation followed by sequential chemotherapy.

Table 5 shows the type and number of procedures performed for patients with insulinoma between 1995 and 2000.

Pancreatic Endocrine Surgery for Insulinoma (1995-2000)

Procedure	No.
Distal pancreatectomy	8
Enucleation	10

Table 5

RESEARCH

The Division actively participates in both clinical and laboratory-based research. Current research interests include:

- Clinicopathologic studies of thyroid carcinoma
- Cytokeratin expression in thyroid cancer
- Ret-PTC oncogene expression in papillary thyroid carcinoma

- Thyroid function after hemithyroidectomy: a long-term follow-up
- Arterial stimulated venous sampling for preoperative localisation of pancreatic insulinomas
- Sequential chemotherapy combined with hepatic artery embolisation for metastatic islet cell carcinoma
- Genetic analysis of multiple endocrine neoplasia syndrome in Chinese patients
- Minimally invasive parathyroidectomy and intraoperative parathyroid hormone assay
- Intraoperative monitoring of endocrine surgery
- Parathyroid autotransplantation during thyroidectomy

COLLABORATIONS

The Division of Endocrine Surgery is dedicated to the clinical service and research of endocrine surgical diseases. The Division welcomes collaboration with colleagues from various subspecialties to ensure that our patients receive the best possible care and treatment.

All patients with thyroid carcinomas are managed by a standard protocol in collaboration with the Department of Clinical Oncology. This includes adjuvant radioactive iodine treatment as well as thyroglobulin monitoring followed by whole body scan, with or without external beam irradiation, for high-risk patients. Patients are followed-up in the Combined Thyroid Clinic that is run jointly by the Division and the Department of Clinical Oncology.

In the treatment of adrenal and pancreatic endocrine diseases, hormonal evaluations are performed jointly with endocrinologists. Percutaneous adrenal venous sampling and intra-arterial stimulated hepatic venous sampling are performed, whenever indicated, by a team of experienced interventional radiologists with the support of expertise from the Department of Biochemistry.

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Division of Esophageal Surgery

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Honorary Clinical Associate Professor



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Yi REN *MBBS(Guiyang), MPhil(Beijing), PhD(London)*
Research Assistant Professor

ACTIVITIES AND SERVICES

The Division of Esophageal Surgery is responsible for the management of patients with disorders of the esophagus and gastric cardia. Specialist services include the assessment and treatment of patients with swallowing problems, esophageal motility diseases, gastroesophageal reflux, perforation, diverticulum, caustic substance ingestion, and benign and malignant tumours of the esophagus.

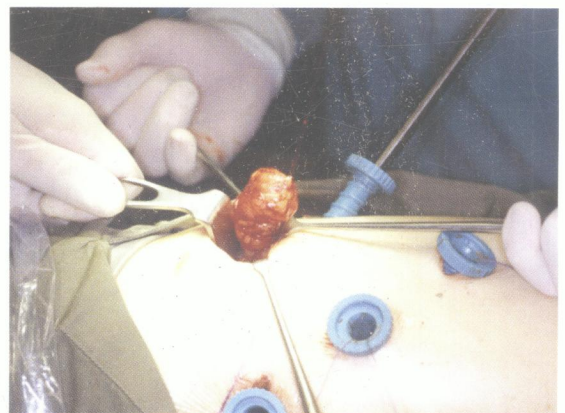
The Division provides the following specialist services:

- Diagnostic and therapeutic upper GI endoscopy
- Endoscopic ultrasonography
- GI physiology including esophageal manometry and 24-hour ambulatory pH monitoring
- Multidisciplinary treatment of esophageal cancer including chemo-radiotherapy
- Multidisciplinary treatment of cancer of the gastric cardia including regional chemotherapy

- Minimally invasive surgery for cancer as well as benign esophageal diseases

DIAGNOSTIC AND THERAPEUTIC UPPER GI ENDOSCOPY

Diagnostic upper endoscopy is performed for patients with a variety of upper gastrointestinal symptoms including dysphagia, odynophagia, heartburn and regurgitation, and epigastric pain. Endoscopic ultrasonography is routinely performed for tumour staging.



Thoracoscopic enucleation of an esophageal leiomyoma

Therapeutic endoscopy is applied mainly in the treatment of esophageal strictures and cancer. Laser therapy, insertion of self-expanding metallic stents for inoperable cancer of the esophagus or gastric cardia, control of tumour bleeding, dilatation of benign strictures, and insertion of fine-bore feeding tubes are regularly performed.

GI PHYSIOLOGY

Esophageal manometry, and 24-hour ambulatory pH monitoring are available for the study of gastroesophageal reflux disease and esophageal motility disorders. These techniques are used to study causes of dysphagia in selected patients.

MULTIDISCIPLINARY TREATMENT FOR ESOPHAGEAL CANCER

In collaboration with the Department of Clinical Oncology, a multidisciplinary approach to the treatment of esophageal cancer is used. For suitable patients, chemotherapy and radiotherapy are given to downstage the cancer before surgical resection is performed, with the aim to improve long-term prognosis. For those with unresectable or metastatic tumours, chemotherapy and radiotherapy are also used successfully for palliation. Treatment for patients are individualised, with a combination of chemoradiotherapy, surgery, and endoscopic methods used to achieve the best result.

REGIONAL INTRA-ARTERIAL CHEMOTHERAPY

In collaboration with the Department of Diagnostic Radiology, regional intra-arterial chemotherapy is used in the treatment of gastric cancer. Traditionally, patients with unresectable or metastatic carcinoma of the stomach were given systemic chemotherapy. Such treatment is, however, associated with frequent systemic toxicity. Regional intra-arterial chemotherapy maximises the local concentration of chemotherapeutic agents while minimizing their in the systemic circulation. Local effects of chemotherapeutic agents may thus be enhanced while systemic side-effects are reduced. For patients with cancer of the gastric cardia, both dysphagia and tumour bleeding are symptoms that are difficult to palliate. In the past, surgical



Thoracoscopic mobilisation of the esophagus in progress

resection was often the only option of palliation. Nowadays, however, regional chemotherapy adds to the armamentarium of methods to treat this tumour.

For suitable patients, regional intra-arterial chemotherapy is also given pre-operatively with the aim to increase the long-term prognosis following esophagogastrectomy.

SURGERY

The Division is internationally recognised in the surgical treatment of cancer of the esophagus. Many referrals to the Division are from overseas. Esophagectomy performed by the Division has one of the lowest mortality rates among experienced centres worldwide. The Division also pioneered minimally invasive esophagectomy in Hong Kong. In selected patients, the thoracoscopic approach enables esophagectomy to be performed with reduced

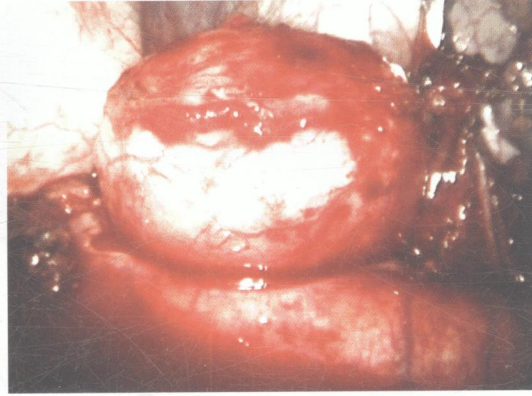


A self-expanding stent inserted for the palliation of dysphagia caused by esophageal cancer



Esophageal cancer treated with chemoradiation. Marked response is shown on this barium study

surgical trauma; patient recovery is enhanced. In collaboration with the Division of Head and Neck Surgery, the Department of Surgery has the largest experience in the procedure of pharyngo-laryngo-esophagectomy in the world. This operation is mainly applied for cancer of the cervical esophagus and hypopharynx.



Epiphrenic diverticulum of the esophagus mobilised through thoracoscopic approach before transection with a stapler

Thoracoscopic approach has also replaced the traditional transhiatal method of esophageal mobilisation for this operation.

For benign diseases, minimally invasive surgery has been applied in recent years in the treatment of achalasia, esophageal diverticulum, stromal tumour of the esophagus, and other motility disorders. Laparoscopic fundoplication for gastroesophageal reflux disease is also performed.



Postoperative appearance of abdominal port sites after laparoscopic myotomy for achalasia

RESEARCH

The Division is active in both clinical and basic scientific research, together with other disciplines. Main areas of interest include:

- Use of multidisciplinary approaches in the treatment of cancer of the esophagus and gastric cardia
 - Techniques of esophagectomy and factors affecting morbidity and mortality rates
 - Application of minimally invasive surgery in the treatment of both benign and malignant diseases of the esophagus
 - Comparative studies on esophageal cancer between East and West
 - Endoscopic palliation of esophageal cancer
 - GI physiology after esophagectomy
- Studies on esophageal cancer at the molecular level are also well established. Recent studies include the establishment of cancer cell lines, detection of genetic alterations and differential gene expressions by micro-array technique, and expression of telomerase in



Esophageal myotomy performed via a thoracoscopic approach for achalasia

esophageal cancer. Future research directions include examining the relationship between macrophage function and esophageal cancer, proto-oncogenes and growth factors, and correlation of the molecular alterations in esophageal cancer with the clinical response to chemoradiotherapy, and patients' long-term prognosis.

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Divisions of Head and Neck Surgery/ Plastic and Reconstructive Surgery/ Otorhinolaryngology

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HEAD AND NECK SURGERY

Under the leadership of Professor William Wei, the Division of Head and Neck Surgery has established a reputation as a tertiary referral centre, not only in Hong Kong but the Asia-Pacific region. Head and neck surgery services are provided in conjunction by otorhinolaryngologists and plastic surgeons.

Many patients present to the Division with advanced-stage cancer. This has meant that radical resection with one-stage reconstruction is the most frequently performed operation in the Division. Microsurgical techniques are used whenever appropriate to transfer optimal tissue for reconstruction. The types of operations performed by the Division between January 1991 and December 2000 are shown in Table 1.

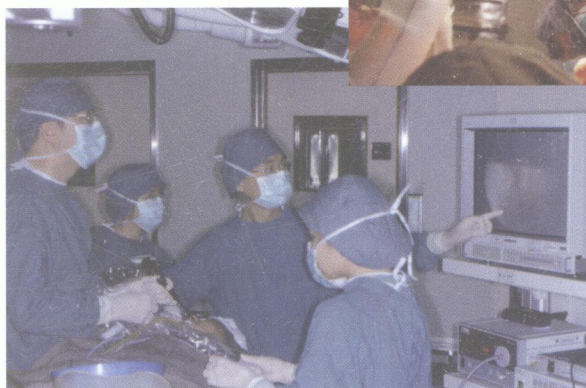
The Division has not rested on its laurels, but continues to strive to further improve its services by actively participating in both clinical and laboratory research. This has resulted in advances in techniques to expose, treat and resect recurrent nasopharyngeal carcinoma after radiotherapy as well as improvements in procedures such as pharyngolaryngoesophagectomy, microvascular free tissue transfer; and saphenous vein interposition graft for intra-arterial chemotherapy for advanced head and neck cancer.



Some staff of the Divisions



Prof. WI Wei and team at work



Operations Performed (1991-2000)

Type of Operation	Number
Gold grain insertion	95
Maxillary swing nasopharyngectomy	80
Neck dissection (RND and SND)	530
Oral cancer resection (CA tongue, tonsil, FOM, palate)	243
Pharyngo-laryngo-esophagectomy	72
Reconstructive surgery (PMF, DPF, jejunal graft, fibular graft)	310
Resection of maxillofacial cancer	120
Salivary gland excision	250
Total laryngectomy	144
Others (excision of benign lesion in the head and neck region, lymph node biopsy)	1300

Table 1

The recent upgrading of laboratory facilities has allowed the Division to benefit from molecular biology techniques to elucidate the behaviour of tumours. Studies on the carcinomas of the alveolus, hypopharynx, nasopharynx and tongue are underway.

The Division also organises courses on Head and Neck Cancer (Table 2) in addition to holding weekly in-house conferences and teaching seminars.

Head and Neck Cancer Courses

Course Title	Year
Pectoralis major mycutaneous flap	1994
Microvascular surgery	1995
Hypopharyngeal carcinoma	1996
Intraoral tumour	1997
Skull base surgery and nasopharyngectomy	1998
Prevention and management of complications in head and neck surgery	1999
Neck mass and neck dissection	2000
Advanced techniques in head and neck surgery	2001
Salivary and thyroid gland surgery	2002

Table 2

PLASTIC AND RECONSTRUCTIVE SURGERY

Activities and Services

The major fields of service provided by this Division, which is headed by Dr. LK Lam, include: head and neck, burns, cleft lip and

palate, facial trauma, breast reconstruction, laser therapy and various aspects of trunk and limb reconstruction. The Division also receives patients with challenging reconstructive problems and who have been referred from other specialty units throughout Hong Kong. (Table 3).

Patients and Operative Procedures (1997-2001)

	Number
Benign facial lesions	1029
Burns	312
Cleft lip and palate	130
Facial trauma	381
Hypertrophic scars and keloids	488
Malignant skin tumours	113
Miscellaneous	415
Operative procedures	
Breast reconstruction (pedicle and free TRAM)	36
Cleft lip and palate repair (primary and secondary)	189
Debridement of burns and skin grafting	60
Excision of cutaneous lesions and local flaps	116
Excision of facial lesions	1651
Excision of skin cancers and flap reconstruction	48
Fixation of facial fractures	92
Microvascular free tissue transfer	125

Table 3

A Plastic Surgery Clinic in the Specialty Outpatient Department, QMH, is held by the Division every Tuesday morning and Thursday afternoon. In Tung Wah Hospital, the Plastic Surgery Clinic operates every Thursday



Waiting area of the Specialty Outpatient Department

afternoon. In addition, the Division also organises other specialist clinics (Table 4).

Specialist Clinics Operated by Division

Type of Clinic	Frequency
Multi-disciplinary Breast Clinic	Weekly
Multi-disciplinary Cleft Lip and Palate Clinic	Twice monthly
Scar Management and Pressure Therapy Clinic	Monthly
Craniofacial Clinic	Quarterly – held jointly with the Divisions of Neurosurgery and Otorhinolaryngology

Table 4

Strengths and Developments

The Division has an enviable reputation for its achievements in major resection and reconstruction of cancers of the head and neck region. Nevertheless, the Division is steadily expanding its scope of services. More elaborate approaches and reconstruction options are now used in head and neck conditions, in particular, skull base lesions. Wider applications of microvascular tissue transfer techniques are also being deployed, and plans are now in place to expand the current laser therapy service.

The Cleft Lip and Palate Centre, established in 1991, adopts a multidisciplinary approach – involving plastic surgeons, dental surgeons, ENT surgeons and speech therapists – for the management of its patients. Direct referral of patients to the orthodontist or



Conducting an examination at the Cleft Lip and Palate Clinic

clinical psychologist can be made immediately, if required. This Centre provides a comprehensive (and virtually one-stop) service for our patients.

Laser therapy for cutaneous lesions has been available in the Division since 1999. The Division is equipped with laser therapy technology, including a Coherent Versapulse 4-in-1 laser; Sharplan Silktouch CO₂ laser; and pulse-dyed laser. This has allowed a comprehensive range of cutaneous diseases, including various vascular and pigmented lesions, to be treated effectively.

Burn patients who are admitted to our Division are managed in a specially designed ward with isolation rooms and surgical bath facilities. There is also a dedicated team of trained nurses who are familiar with extensive



Skin Bank where human allograft skin is stored

burn wound management. The Division is also in charge of a skin bank for the processing and storage of human allograft skin for the management of extensive burns.

The demand for breast reconstruction is increasing. With the implementation of the Breast Cancer Screening Programme, more and more young patients are diagnosed with early cancer and who request for breast reconstruction after mastectomy. These patients are then seen in a multi-disciplinary clinic attended by various specialists. Surgery is performed jointly with the breast oncologic surgeon, and immediate reconstruction with the free TRAM flap is the method of choice.

Research

The Division is a strong advocate of the need for quality research, and our current clinical focus includes:

- The use of allograft skin in the treatment of large area burns
- Treatment of hypertrophic scars and keloids

- Study on pigmented cutaneous lesions in Orientals
- Laser treatment of cutaneous lesions in Orientals

Collaborations

The Division has collaborations with both local and overseas institutions for joint management of patients. As one of the subspecialty divisions of the Department, there are numerous opportunities for inter-division referral, consultation, and joint management of patients who need various anatomic reconstructions. For example, we work closely with colleagues within the Department, including the Divisions of Otorhinolaryngology, Neurosurgery and Paediatric Surgery.

The Division also collaborates with the Australian Craniofacial Unit of Adelaide, South Australia, to run an annual Craniofacial Clinic for the joint management of patients with complicated craniofacial deformities.

OTORHINOLARYNGOLOGY (EAR, NOSE AND THROAT SURGERY)

Activities and Services

The Division of Otorhinolaryngology, which serves half of the population of Hong Kong Island, enjoys a reputation as a leading tertiary referral centre – not only in Hong Kong, but also in Asia. Major otological procedures such as lateral skull base surgery, including the removal of acoustic neuroma,

Operations Performed (1991-2000)

Type of Operation	Number
Direct laryngoscopy and microlaryngoscopy	430
Endoscopy (upper panendoscopy, bronchoscopy, esophagoscopy sinoscopy)	1986
Major nasal surgery (turbinectomy, septoplasty SMR, antrostomy, FESS)	950
Cochlear implantation	80
Major salivary gland resection (parotid, submandibular)	140
Mastoidectomy and ossiculoplasty	350
Tonsillectomy and adenoidectomy	650

Table 5

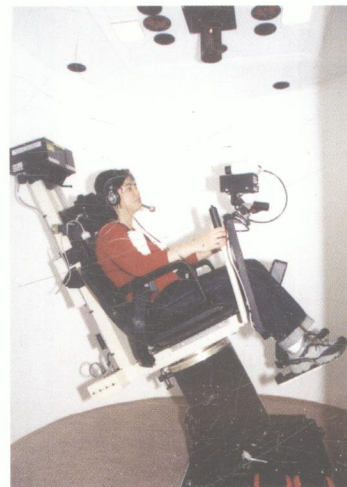
petrosectomy and cochlear implantation have all been successfully performed. Table 5 shows the types of operations performed by the Division from 1991 to 2000.

Otorhinolaryngology in Queen Mary Hospital encompasses a comprehensive service including specialist outpatient clinics, a day-care



A speech therapy session in progress

section with six day beds as well as a full range of speech therapy services. The Hearing-Balance



The 'Rotary Chair'

Assessment Centre is also located in this complex and has the facilities, such as a brainstem-evoked audiometer, to perform the full spectrum of audiological and vestibular evaluation tests for neonates as well as elderly patients. The Assessment Centre is especially well equipped to evaluate patients with dizziness. Highly sophisticated

instruments designed for this purpose include the "Equitest" and the "rotary chair".

Strengths and Developments

The Division is the first in Hong Kong to successfully perform multiple channel cochlear implantation in both adult and paediatric patients. The main goal of the Division is to improve patient outcome. To achieve this, colleagues from the Division of Neurosurgery are routinely invited to participate in combined

craniofacial resections. In addition, several other avenues are being explored. These include the development of new surgical techniques as well as the improvement of existing surgical procedures. For example, approaches to expose, treat and resect current nasopharyngeal carcinoma after radiotherapy have been practised. Other surgical procedures being explored as potential areas that can further improve patient outcome are pharyngolaryngoesophagectomy, microvascular free tissue transfer, and saphenous vein interposition graft for intra-arterial chemotherapy for advanced head and neck cancer.

Efforts made by the Division to develop a Paediatric Ear Nose and Throat service were rewarded with the establishment, in 1997, of a comprehensive range of care for children with this need. These include the management of neonates with airway problems, early detection of deaf children, and cochlear implantation. In addition, the Division has established a Rhinitis Clinic to serve patients with nasal problems. Nasal passage evaluation with acoustic rhinomanometry, and functional endoscopic sinus surgery are now routinely practised.

Research

The Division has benefited from laboratories with the facilities to conduct tumour research at a molecular level. Current research interests of the Division include:

- Cost-benefit evaluation of cochlear implantation of Cantonese speaking children
- Desensitisation of chronic allergic rhinitis
- Ear and nose complications of radiotherapy treatment of nasopharyngeal cancer
- Evaluation of CT anatomy of nose and sinuses
- Somnoplasty treatment of turbinate hypertrophy
- Surgical treatment of sleep-related breathing disorders, snoring and sleep apnoea
- Molecular basis of head and neck cancers

Collaborations

In addition to conducting its own research, the Division also collaborates with other departments in a number of study areas including:

- Comprehensive management of sleep apnoea
- Head and neck cancer: screening, management and rehabilitation
- Maxillofacial trauma and rehabilitation service
- Speech assessment and treatment for patients with cleft lip and palate

The Division has also strengthened its links with China. Since 1998, Professor Wei and the Division have organised International Courses on Head and Neck Surgery in various institutions throughout China.

The Division provides ENT services to the Western cluster of Hong Kong Island and to the Department's network of hospitals. The attendance in the Out-Patient Clinic in Tung Wah Hospital now numbers over 7,000 per year, and a wide range of pathologies are managed – from rhinitis to profound deafness. Tung Wah Hospital has claimed two Hong Kong firsts in the field of otorhinolaryngology: the first multi-channel cochlear implant (1989), and the first paediatric multi-channel cochlear implant (1994). Paediatric ENT services provided at Duchess of Kent Children's Hospital include the management of hearing and speech problems, drooling, and airway problems.



Dr. P.W. Yuen at work in the laboratory

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- **Wong DSY, Lam LK, Chung JHP, Ng RWM, Li GHK, Chan V.**
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Scand J Plast Reconstr Surg Hand Surg (in press).



Division of Hepatobiliary/ Pancreatic Surgery and Liver Transplantation

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Kwan MAN MB, PhD

Post-doctoral Fellow

ACTIVITIES AND SERVICES

The Division is dedicated in its strive to achieve the highest standard of clinical care found anywhere in the world. It provides a comprehensive service that includes not only surgery but also endoscopy and ultrasonography for various hepatobiliary and pancreatic diseases.



Prof. ST Fan and team at work

LIVER CANCER

Liver cancer is the second leading cause of cancer-related death in Hong Kong. The Department of Surgery is the largest tertiary referral centre in Hong Kong for patients with liver disease, and over the past decade, the number of hepatic resections performed by the Division has progressively increased (Figure 1). The refinement of treatment through clinical research to improve the outcome of patients with liver cancer is a top priority of the Division.

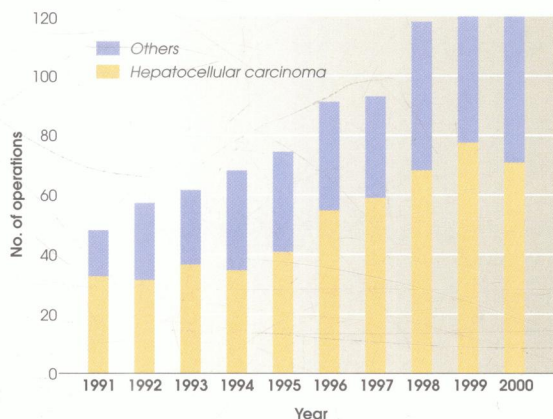


Figure 1 Number of hepatic resections performed between 1991 and 2000

With the application of laparoscopic and intraoperative ultrasound, ultrasonic dissector, perioperative nutritional support, and intensive surveillance and treatment for intrahepatic recurrence, the mortality rate for patients who underwent hepatic resection for hepatocellular carcinoma has decreased to almost 0% while the five-year survival rate has increased to around 46%. Almost 80% of hepatic resections can be performed without the need for blood transfusion

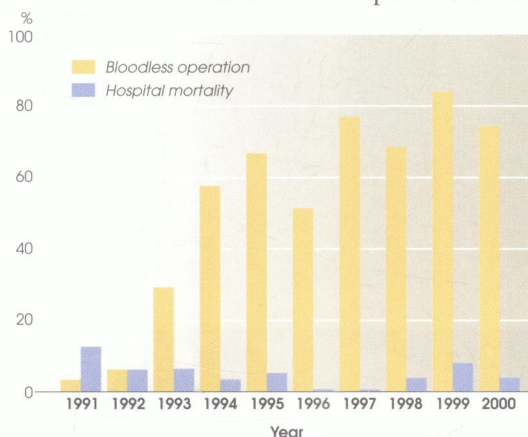


Figure 2 Hospital mortality and proportion of patients who underwent hepatic resection without the need for blood transfusion

can be performed without the need for blood transfusion (Figure 2).

For patients with unresectable liver cancer, the advent of transarterial oily chemoembolisation and radiofrequency ablation has offered effective treatment options. More basic research into the significance of hepatitis B virus activity and angiogenesis in affecting the outcome of patients with liver cancer is underway.

LIVER TRANSPLANTATION

In October 1991, the Division performed the first successful liver transplant in Hong Kong. Since then, the Liver Transplant Service at Queen Mary Hospital has developed into the largest programme, not only in China but also Southeast Asia. By the end of July 2001, a total of 180 liver transplants had been performed with 1-year and 5-year survival rates of 83% and 79%, respectively (Figure 3).

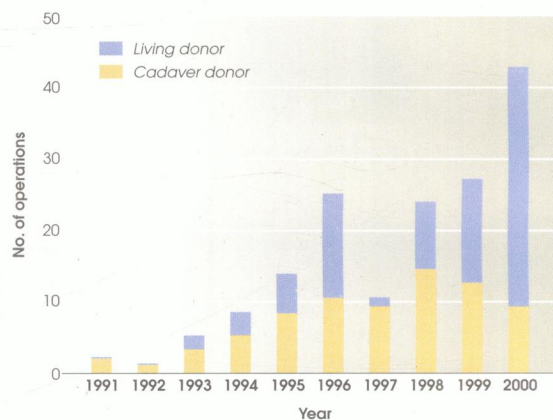


Figure 3 Number of liver transplants performed (1991 - 2000)

Living donor liver transplantation for paediatric patients was introduced in 1993. The Division pioneered the application of living donor transplantation to adult patients particularly for high-urgency situations using both left lobe graft (1994) and right lobe graft (1996). Such innovative techniques provide an option to save desperately ill patients when cadaveric donors are scarce (Figures 4a - d).

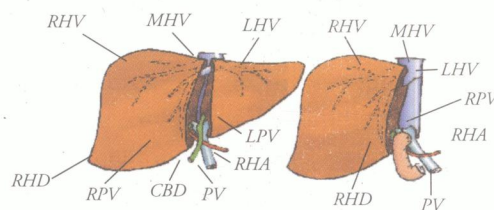


Figure 4a Donor and recipient livers

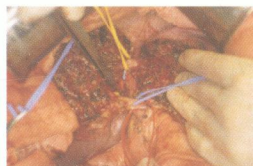


Figure 4b Donor operation



Figure 4c Right lobe graft from living donor



Figure 4d Recipient operation

ACUTE CHOLANGITIS, CHOLECYSTITIS AND PANCREATITIS

Through active clinical research and randomised control trials conducted by the Division, the current management for patients with acute cholecystitis, cholangitis and pancreatitis has been modified based on evidence-based medicine. Early intervention (within 24 hours of admission) using endoscopic papillotomy for patients with severe acute cholangitis and biliary pancreatitis has been shown to significantly reduce morbidity and mortality.

ENDOSCOPIC AND LAPAROSCOPIC SURGERY

At the Endoscopy Centre of the Department of Surgery, the Division offers a full range of diagnostic and therapeutic procedures for hepatobiliary and pancreatic diseases using flexible endoscopes. Types and numbers of endoscopic procedures performed in 2000 are shown in the Table.

Endoscopic Procedures Performed in 2000

Endoscopic procedure	No.
ERCP	650
Endoscopic papillotomy	165
Endoscopic biliary stent insertion	180
Endoscopic variceal banding/ sclerotherapy	138

Table

The Department of Surgery, through its achievements in the early endoscopic treatment of acute biliary pancreatitis and acute cholangitis, has been internationally recognised as a centre of high repute in the field of endoscopy.

The benefits of key-hole surgery have been extended to patients with hepatobiliary diseases. These include procedures such as laparoscopic ultrasonography, laparoscopic cholecystectomy, laparoscopic common bile duct exploration, laparoscopic splenectomy, and laparoscopic marsupialisation of liver cysts. In addition, clinical studies have been conducted by the Division to determine the optimal timing of laparoscopic cholecystectomy for acute cholecystitis; the value of laparoscopic ultrasonography in patients with hepatocellular carcinoma; and endoscopic ultrasonography for idiopathic pancreatitis.

RECURRENT PYOGENIC CHOLANGITIS

The Division excels in the management of patients with recurrent pyogenic cholangitis or hepatolithiasis. Excellent long-term results are obtained through the use of a combination of liver resection, construction of hepaticocutaneous jejunostomy, flexible choledoscopy and electrohydraulic lithotripsy.

RESEARCH

The Division is renowned internationally for its excellence in both clinical service and research. Clinical and laboratory research has been focused in several clinical areas:

Liver Cancer

- Surgical techniques in hepatic resection of liver cancer
- Angiogenesis and hepatocellular carcinoma
- Hepatitis B activity and hepatocellular carcinoma
- Postoperative adjuvant therapy after curative resection of hepatocellular carcinoma
- Genome-wide expression study of liver cancer by DNA microarray

Liver Transplantation

- Living donor liver transplantation using right lobe graft
- Liver transplantation for chronic hepatitis B
- Liver transplantation for hepatocellular carcinoma
- Small-for-size orthotopic liver transplantation in a rat model
- Gene transfer in a rat model of liver transplant

Acute Pancreatitis

- Endoscopic ultrasonography
- Timing of laparoscopic cholecystectomy for acute biliary pancreatitis

Endoscopic and Laparoscopic Surgery

- Early endoscopic retrograde cholangiopancreatography for acute cholangitis
- Laparoscopic and endoscopic ultrasonography
- Somatostatin prophylaxis for post-ERCP pancreatitis

Others

- Pancreatic duct drainage after pancreaticoduodenectomy

GRANTS AWARDED

The research excellence of the Division has been recognised by its success in grant/funding applications. Recent awards include:

- **RGC Research Grant 1997 (HK\$813,600)**
Vascular inflow occlusion by Pringle manoeuvre in hepatectomy - a prospective randomized trial
- **CRCG Research Grant 1998-1999 (HK\$115,300)**
Prospective evaluation of prognostic significance of tumor angiogenesis and angiogenic factors in hepatocellular carcinoma
- **CRCG Research Grant 1999 (HK\$110,000)**
Prolongation of liver graft survival in the absence of immunosuppressive drugs in a rat model via CTLA4Ig gene transfer
- **Li Ka Shing Foundation Grant (HK\$580,000)**
A prospective study of effects of qiquong in patients with inoperable hepatocellular carcinoma receiving transarterial chemoembolisation and associated cytokine changes
- **University Research Committee Grant (HK\$120,000)**
Adult-to-adult living donor liver transplantation using extended right lobe graft for patients with end-stage liver diseases.
- **RGC Research Grant 2000 (HK\$905,940)**
Right-sided hepatectomy for hepatocellular carcinoma by anterior approach - a prospective randomised trial
- **CRCG Research Grant 2001-2001 (HK\$95,000)**
Correlation of tumour angiogenic activity and response to transarterial oily chemoembolisation in hepatocellular carcinoma

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- **Fan ST, Lo CM, Lai ECS, Chu KM, Liu CL, Wong J.**
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Division of Neurosurgery

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ACTIVITIES AND SERVICES

The Division of Neurosurgery is committed to providing the highest level of care to patients who require neurosurgical attention. In addition to offering a comprehensive neurosurgical service to patients admitted to Queen Mary Hospital, the Division also operates other neurosurgical clinics. These include the Paediatric Neurosurgical Clinic and the Radiosurgery Clinic at Queen Mary Hospital, as well as the Neuro-rehabilitation Clinic, located in the MacLehose Medical Rehabilitation Centre.

Pathologies that are presented with a particularly high frequency to the Division include brain tumours, cerebral aneurysms, arteriovenous malformations as well as pituitary and spinal tumours. In the emergency setting, the most common pathologies encountered by the Division are severe head injuries and cerebrovascular disease.

Table 1 shows the types of neurosurgical procedures performed by our Division in 2000.

Neurosurgical Procedures Performed in 2000

Type of Procedure	Number Performed
CSF diversion	166
Trauma	87
Cerebrovascular disease	75
Burr hole	48
Craniotomy for brain tumour:	
Supratentorial	44
Infratentorial	9
Aneurysm / AVM	39
Craniotomy for others	37
Skull base surgery – tumour	22
Pituitary surgery	18
Spinal surgery	16
Stereotactic surgery	16
Neuroendoscopy	7
Pain control	5
Epilepsy surgery	2
Others	49
Total	640

Table 1

STRENGTHS AND DEVELOPMENTS

The Division supports a full neurosurgical service, and has established an enviable reputation for its achievements in this surgical subspecialty. Nevertheless, the Division is steadily expanding its range of services. For example, functional stereotactic operations can now be performed for patients with movement disorders, such as Parkinson's disease. Other recent developments of the Division include epilepsy surgery, skull base surgery, neuroendoscopy, deep brain stimulation, extracranial-intracranial vascular bypass, endoscopic pituitary surgery, and frameless stereotaxy.

RESEARCH

The Division participates actively in both clinical and non-clinical research. Current research interests include:

- Neuropsychological sequelae and electrophysiological changes after head injury.
- Cytogenetic studies in glioma.
- Intraoperative electrophysiological monitoring.
- Transcranial Doppler ultrasound in postoperative monitoring.
- Studies of CSF shunt survival in paediatric hydrocephalic patients.
- Outcome of surgery for haemorrhagic stroke in Hong Kong Chinese.

- Decompressive craniectomy for cerebral infarction.
- Endoscopic endonasal procedures for pituitary tumours.
- Applications of CT perfusion scanning in neurovascular conditions.

COLLABORATIONS

The Division has collaborations with both local and overseas institutions. The Division plays an active role in the multi-disciplinary clinical meetings that are held regularly in Queen Mary Hospital. These include the Brain Tumour Meeting, Neuroradiology Meeting, Epilepsy Surgery Meeting, and X-knife Radiosurgery Meeting. Furthermore, the Division also offers its expertise, when consulted upon, to other hospitals throughout Hong Kong.

The Division regularly organises neurosurgical symposia, live surgical demonstrations, and cadavaeric dissection workshops, where distinguished speakers from Europe and North America are invited to talk on their area of expertise.

The Division is an enthusiastic participant of prestigious international events such as the International Cancer Congress, Hong Kong Surgical Forum as well as scientific meetings of the Hong Kong Neurosurgical Society. The presence of the Division in these gatherings has helped it to gain recognition among the international surgical community.



Dr. YW Fan and his team in 2002

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- **Mak W, Cheung RTE, Fan YW, Ho SL.**
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Ann Coll Surg HK 1999; 3:80-4.



Division of Paediatric Surgery

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ACTIVITIES AND SERVICES

Paediatric surgery, as practised in Hong Kong, is surgery of infants and children in the broadest sense with minimal anatomical boundaries. It encompasses surgery of congenital anomalies of the newborn, surgery of infants and children, solid tumours, paediatric urology, paediatric gynaecological and intersex problems, endoscopy and laparoscopic surgery, as well as trauma. Between 1996 and 2001, a total of 4,635 paediatric operations, mostly major and ultra-major, was performed. In addition, during this period, 27,530 outpatients were seen by the Division.

The Division's in-patient activities centre around two purpose-built paediatric surgical



Professorial ward round in K15

wards – K15 South and North – with 40 beds; a neonatal surgical unit with eight beds; and a combined (medical and surgical) paediatric and neonatal intensive care unit (K10) with 16 beds. A special section in the Department's Day Case Center, located in K10, caters for paediatric surgical day patients. The wards provide a children-friendly environment and are staffed by experienced paediatric surgical nurses. Daily ward rounds are conducted in the mornings and evenings.

Operating theatres in K11 are modern and well-equipped with the latest laparoscopic instruments, close circuit televisions, lasers, ultrasonic dissectors, and other 'state-of-the-art' technology. The theatre service is supported by a team of dedicated paediatric anaesthetists and theatre nurses. A comprehensive range of special



Prof. PKH Tam with some of his team in 2001

investigations is provided. These include 24-hour pH study, electrogastrography and endoscopy for upper GI diseases, anorectal manometry and colonoscopy for lower GI conditions as well as video-urodynamics for bladder diseases.

In addition to its daily duties, the Division holds regular meetings to ensure its smooth and efficient running (Table 1).



Conducting ward rounds in neonatal intensive care unit



Meetings of the Division

Meeting	Frequency
Postgraduate session	Weekly
Administrative meeting	Weekly
Total parenteral nutrition meeting* (joint)	Weekly
Combined neonatal and paediatric intensive care unit meeting	Weekly
Mortality and morbidity meeting	Monthly
Combined radiology meeting (joint)	Monthly
Combined pathology meeting (joint)	Monthly
Combined oncology meeting (joint)	Monthly
Journal club (by rotation)	Monthly

* Total parenteral nutrition is managed by a team consisting of a surgeon, a paediatrician, a pharmacist and dedicated nurses.

Table 1

STRENGTHS AND DEVELOPMENTS

The Division is the first Paediatric Surgical Centre established in Hong Kong, and over the years, has developed into a major quaternary referral centre of high international repute.



Increasing application of laparoscopic surgery in infants and children

In addition to providing a comprehensive paediatric surgical service, the Division specialises in hepatobiliary diseases, paediatric liver transplantation, gut motility disorders, and endosurgery.

Hepatobiliary diseases including biliary atresia and choledochal cyst are common in this region. The Division has performed portoenterostomy (Kasai's operation) for more than 80 infants with biliary atresia: 65%

have good biliary drainage, and 25% have intermediate drainage. These figures compare favourably with other reported results. Over 100 patients with choledochal cyst have been treated here. Cyst excision, despite being technically more demanding, is preferred to drainage procedures and has been performed in the past 70 consecutive patients with no mortality and minimal morbidity.

The Division has a special interest in the management of gut motility disorders and offers a comprehensive range of expertise – from laboratory to bedside. Genetic analysis, anorectal physiology, advanced immunohistochemistry and laparoscopic pullthroughs all form parts of an up-to-date programme of diagnosis and treatment for Hirschsprung's disease and allied disorders. Over 30 articles in international journals as well as two book chapters have been published by the Division on this subject.

Surgical endoscopy and laparoscopic surgery are practised extensively in the Division. Our experience in laparoscopic varicocele ligation, as well as new applications of laparoscopy including laparoscopic pancreatotomy, and laparoscopic pullthrough for imperforate anus and Hirschsprung's disease have been reported at recent international meetings.

The Division also operates specialist clinics in both QMH and the Duchess of Kent Children's Hospital (Table 2).

Specialist Out-patient Clinics Organised by the Division

Specialist Clinic	Location
New referrals, and follow-up (general, urology, hepatobiliary and gastrointestinal)	KGOPD, QMH
Liver transplantation patients	S4 QMH
Pressure garment	Duchess of Kent Children's Hospital

Table 2

RESEARCH

The Division is strongly committed to both laboratory and clinical research. In addition to the clinical staff, there is currently one non-clinical assistant professor, one research



PhD student performing microsurgery in rat small bowel transplantation experiments

assistant professor, four post-doctoral research fellows, one research fellow, five postgraduate research students and four research assistants/technicians in the research team. Professor Tam is the Founding Director of the Centre of Human Development and Birth Defects, a multi-disciplinary academic group in the University that promotes research and education in this area.

Clinical studies have focused on the management of Hirschsprung's disease and biliary atresia as well as paediatric liver transplantation. New laboratory programmes include genetic analysis and developmental biology of Hirschsprung's disease (congenital intestinal aganglionosis), experimental small bowel transplantation immunology, and studies on intestinal ischaemia-reperfusion and



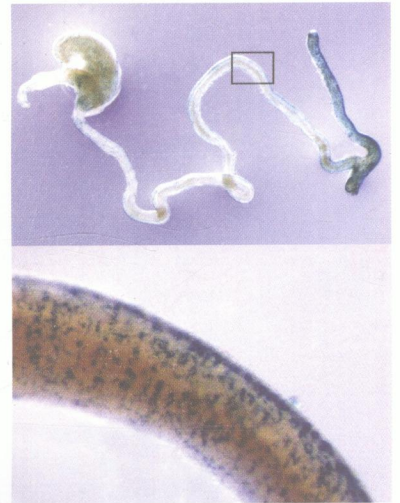
Research meetings of the Division are held weekly

pathogenesis of necrotising enterocolitis. A laboratory to focus on the study of pathophysiology of human dendritic cells was recently established. The immunopathological role of dendritic cells in human diseases will be investigated, and dendritic cell-based immunotherapy against paediatric cancers will be initiated.

The Division is active in research training. In 2000, it was awarded HK\$600,000 by the Croucher Foundation to organise what was a highly successful and over-subscribed 'Advanced Study Institute on Genetics, Health and Disease in the Post Genome Project Era', which involved 17 invited international experts. More recently, an 'Advanced Study Institute on Fundamentals of Human Genetics and Genomic Biology' was organised and held in 2001.

Between 1997 and 2001, the Division has acquired over HK\$9M in research funding as principle investigators, including four Research Grants Council Earmarked Grants (totaling HK\$3M). During this same period, five book chapters and 60 original articles written by the Division have been published in leading international journals.

The Division is committed to education and training in the region. A pioneering 'Train-the-Trainers' programme was introduced in 1998 and this is having a major impact on paediatric surgical training in China.



Embryonic gut of transgenic mouse for the study of Hirschsprung's disease



Research staff enjoying a rare moment of relaxation

With over HK\$2.3M funding from the SK Yee Medical Foundation, surgeons from three leading centres in Beijing, Shanghai and Shenyang are being educated in modern surgical training. Upon return to their institutions, these surgeons go on to establish new training programmes to train the next generation of nationwide surgeons.

COLLABORATIONS

Paediatric liver transplantation was established in collaboration with the Division of Hepatobiliary Surgery in 1993. Since then, some 33 paediatric liver transplants have been performed, with a survival rate of over 80%.

Major network hospitals include DKCH (which provides rehabilitation beds for QMH patients), PYNEH, KWH, TWH and GH. Seamless specialist care is provided by inter-hospital transfers, on-site and tele-consultations, regular meetings and communications, and joint patient management.

The Division also has close collaborations with other departments within the University eg. Department of Biochemistry as well as leading international institutions. These include Imperial College (London), Royal London School of Medicine, University of Oxford, University of Edinburgh, International Agency for Research on Cancer (Lyon, France), Instituto Giannina Gaslini (Genova, Italy), Beijing Children's Hospital, and other leading medical institutions in China.



Some of the clinical staff and Visiting Fellows in 2001



Inauguration of Train-the-Trainer Programme by the Vice-Chancellor of The University of Hong Kong and the Presidents of Capital Medical University and Shanghai Second Medical University

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Division of Upper Gastrointestinal Surgery

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Samuel KO BSc, PhD

Post-doctoral Fellow

ACTIVITIES AND SERVICES

Clinical Services

The Division of Upper Gastrointestinal Surgery is responsible for the management of patients with disorders of the stomach, duodenum, and small bowel. Specialist services are provided for ingested foreign bodies, gastrointestinal bleeding, non-specific abdominal pain, peptic ulcer diseases and their complications (bleeding, perforation, and obstruction), and, benign and malignant tumours of the stomach, duodenum, and small bowel. With an ageing population, such clinical services have become more complicated and demanding.

Inpatient Services

The Upper GI Surgery Ward C5 has 28 beds in Queen Mary Hospital catering to both emergency and elective admissions. Common emergency conditions, of which there are 1,600 yearly, include ingested foreign bodies, gastrointestinal bleeding (ulcer, gastritis, Mallory Weiss Syndrome, esophagitis, tumour, small bowel, or obscure origin), and abdominal pain (ulcer, perforated ulcer, tumour, or non-specific nature). Elective admissions numbering 300 per year mainly involve patients with gastric tumours. The Division also provides specialist consultation services to all other Departments of Queen Mary Hospital as well as other hospitals in the Hong Kong Special Administrative Region.

Outpatient Services

The Division runs two specialist outpatient clinics weekly in the S Block of Queen Mary Hospital and receives 8,500 visits annually. The Upper GI Oncology outpatient clinic manages patients with gastric, duodenal, or small bowel tumours and the Upper GI outpatient clinic manages patients with non-tumour upper GI conditions. Both clinics receive patients discharged from the Upper GI Surgery Ward as well as referrals from sources such as the Accident & Emergency Department and other departments of Queen Mary Hospital, other outpatient clinics of the Hospital Authority, and private practitioners.

Other Related Wards and Facilities at Queen Mary Hospital

- Admission Ward D5 where all patients with a surgical emergency are admitted
- Esophageal Functional Laboratory at B5 where investigations such as esophageal manometry and 24-hour ambulatory pH monitoring are performed
- Intensive Care Unit (ICU) at C4 where surgical patients requiring intensive care are managed
- Intermediate Care Area (ICA) at E5 where a moderate degree of intensive care is provided
- Surgery Day Centre K14N where day patients are admitted
- Private wards K21S and K21N where private patients are managed
- Specialist Outpatient Clinic at the S Block of Queen Mary Hospital

Special Equipment

- Current models of upper endoscope, bronchoscope, and enteroscope
- Instruments for therapeutic endoscopy including injector, clipping, and heater probe
- Argon plasma coagulator
- Expandable metallic stents for endoscopic stenting of malignant GI strictures
- Endoscopic ultrasonography
- Percutaneous ultrasound
- Isotope ratio mass spectrometer for C13-urea breath test
- Esophageal manometry
- 24-hour ambulatory pH monitoring

Special Equipment in the Operating Theatre

- An array of laparoscopic instruments for laparoscopic surgery
- Harmonic scalpel for laparoscopic surgery
- Laparoscopic ultrasound

STRENGTHS AND DEVELOPMENTS

Endoscopy

Except for bedside portable endoscopy for very sick patients, all endoscopic procedures are performed in the Surgical Endoscopy Centre. The Division performs the following endoscopic procedures:

- Diagnostic and therapeutic upper endoscopy (4,000 annually)

Diagnostic upper endoscopy is performed for patients with conditions such as dysphagia, heartburn and regurgitation, epigastric pain, upper GI bleeding, symptoms of gastric outlet obstruction, epigastric mass, or unexplained anaemia. Endoscopic biopsies are taken for diagnosis of malignancy as well as for *Helicobacter pylori* infection.

Therapeutic endoscopy is also applied for retrieval of foreign bodies, insertion of self-expanding metallic stents for inoperable cancer of stomach, cessation of bleeding from gastric or duodenal ulcers, removal of

gastric polyps, percutaneous endoscopic gastrostomy (PEG), and insertion of feeding tubes. A 24-hour emergency service is available for patients with substantial GI bleeding.

- Endoscopic ultrasonography (220 annually) This is performed routinely for diagnosis of submucosal lesion of the upper GI tract (for example, a stromal tumour), and staging of carcinoma of the esophagus and stomach. It is currently the most accurate method for local staging of tumour and lymph node spread in upper GI cancer.
- Small bowel enteroscopy

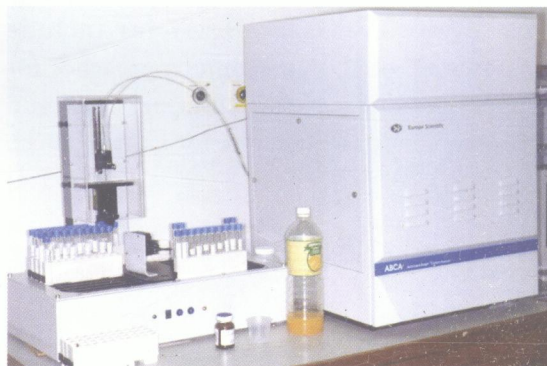
This is valuable for investigating patients with suspected small bowel pathology. In about 5% of patients presenting with GI bleeding, the bleeding source originates from the small bowel.



Endoscopic ultrasonography in a patient with gastric stromal tumour

Urea Breath Test

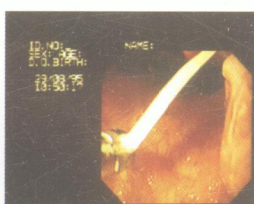
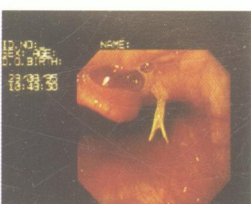
A non-radioactive C13-urea breath test is available for accurate testing of *Helicobacter pylori* infection. The urea breath test allows detection of *Helicobacter pylori* without the need for endoscopic biopsies.



Urea breath test

Regional Intra-arterial Chemotherapy

The Division, in collaboration with the Department of Diagnostic Radiology, introduced the use of regional intra-arterial chemotherapy for the treatment of gastric cancer in Hong Kong. Traditionally, patients with unresectable or metastatic carcinoma of the stomach were given systemic chemotherapy. Such treatment is, however, associated with frequent systemic toxicity. Regional intra-



Fish bone retrieved endoscopically

arterial chemotherapy maximises the local concentration of chemotherapeutic agents and minimises levels in the systemic circulation. The local effects of chemotherapeutic agents

may thus be enhanced while systemic side effects are obviated as far as possible. The results of treatment with regional intra-arterial chemotherapy have been remarkable. Regional intra-arterial chemotherapy offers new hope for patients with diseases that were thought to be unsalvageable, and it is also given pre-operatively

to patients with advanced gastric cancer with an aim to increase the chance of cure following gastric resection.

Operations

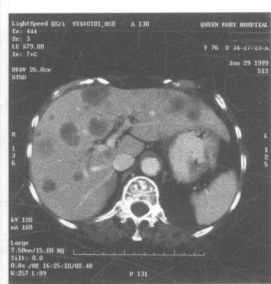
Surgical operations are a well-established service of the Division. Most operations are performed for neoplastic disease of the upper GI tract. In recent years, minimally invasive surgical methods such as thoracoscopic and laparoscopic approaches for gastric disorders have been developed. Examples include laparoscopic or thoracoscopic approaches for peptic ulcer diseases, staging laparoscopy and laparoscopic ultrasonography for gastric cancer,

and laparoscopic resection of benign gastric tumours.

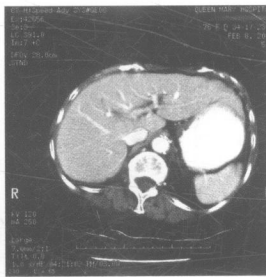
A 24-hour emergency surgical service is available for the management of upper GI disorders such as perforated ulcer diseases and gastrointestinal bleeding that cannot be controlled by endoscopic means.

RESEARCH

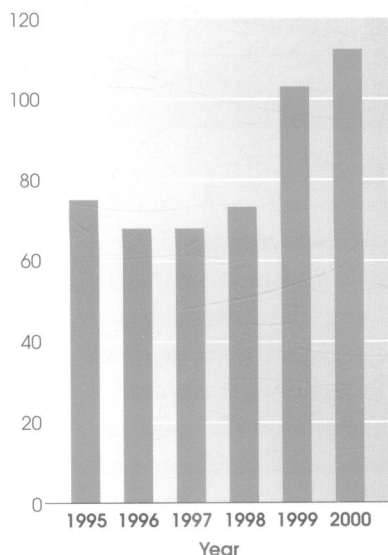
- A prospective randomised trial on the use of flexible gastroscope vs. bronchoscope in the management of foreign body ingestion.
- A prospective randomised trial comparing the use of omeprazole-based dual and triple therapy for the eradication of *Helicobacter pylori* (1000 patients recruited).
- A prospective study on the *Helicobacter pylori* status of patients who present with perforated peptic ulcer disease.
- A prospective study on the value of *Helicobacter pylori* eradication in patients with peptic ulcer complicated by bleeding.
- A study on the *Helicobacter pylori* status of patients with a past history of vagotomy for peptic ulcer disease.
- A study on the *Helicobacter pylori* status of patients with a past history of gastrectomy for peptic ulcer disease.
- A prospective study on regional intra-arterial chemotherapy for unresectable gastric cancer.
- A prospective randomised controlled trial on neoadjuvant regional intra-arterial chemotherapy for gastric cancer.



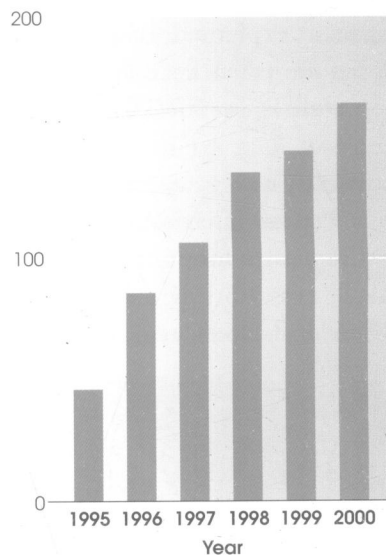
A. CAT scan of a patient with carcinoma of stomach and bilobar liver metastases



B. CAT scan of same patient after regional intra-arterial chemotherapy. Note the dramatic response of both primary tumour and liver metastases



Graph showing the rising number of emergency upper GI operations in recent years



Graph showing the rising number of elective upper GI operations in recent years

AWARDS AND GRANTS

1. Dr. KM Chu was the 1999 International Guest Scholar of the American College of Surgeons.
2. A prospective randomised controlled trial on neoadjuvant regional chemotherapy for gastric cancer. Grant received: RGC Research Grant Award, July 1999, HK\$890,744 (with Professor John Wong).
3. Aberrant promoter hypermethylation of growth regulatory genes in cancers of the gastrointestinal tract. Grant received: RGC Research Grant Award, July 1999, HK\$662,880 (with Dr. SY Leung, Department of Pathology).
4. Dr. Chu received the JSJS 2001 Akita Award from The Japanese Society of Gastroenterological Surgery.

TEN REPRESENTATIVE PUBLICATIONS OF THE DIVISION

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- **Chu KM, Law SYK, Fok M, Wong J.**
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- **Chu KM, Poon R, Tuen HH, Law SYK, Branicki FJ, Wong J.**
A prospective comparison of a locally made rapid urease test and histology for the diagnosis of *Helicobacter pylori* infection. **Gastrointestinal Endoscopy 1997;46:503-6.**
- **Chu KM, Choi HK, Tuen HH, Law SYK, Branicki FJ, Wong J.**
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- **Chu KM, Law S, Branicki FJ, Wong J.**
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- **Leung SY, Yuen ST, Chung LP, Chu KM, Chan ASY, Ho JCI.**
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- **Chan AOO, Lam SK, Chu KM, Lam CM, Kwok E, Leung SY, Yuen ST, Law SYK, Hui WM, Lai KC, Wong CY, Hu HC, Lai CL, Wong J.**
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Division of Urology

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Medical Officer

Kwan Lun HO MBBS, MRCS(Edin)

Medical Officer

ACTIVITIES AND SERVICES

The Division of Urology occupies one floor of the Queen Mary Hospital - consisting of two wards with a total of 35 beds. Some 30 beds have also been allocated to the Division in Tung Wah Hospital (TWH). In addition to providing a comprehensive urology service to the general public, the Division is a tertiary referral centre for all of Hong Kong. The Division has seven permanent staff, two advanced trainees in urology and two basic surgical trainees in rotation.

In 2000, more than 15,000 patients - of which 2,000 were new referrals - were seen in the Urology Specialist Clinic. During the same period, around 2,800 patients, including 1,300 patients with emergency urology conditions,



Dr. PC Tam and his team in 2002

were admitted to the urology ward.

Most major operations are performed in QMH while endourological procedures are mostly performed in TWH. Over 1,000 major urological operations are performed in QMH

and TWH each year. Both centres are fully accredited (by the Royal College of Surgeons of Edinburgh and the College of Surgeons of Hong Kong) for advanced urology training with a capacity to train four advanced trainees:

Areas of special interest are described in the following sections. The range of specialist clinics organised and run by the Division is shown in Table 1 while the various meetings organised by the Division are shown in Table 2.

GENERAL UROLOGY

Benign prostatic hyperplasia

Management of benign prostatic hyperplasia (BPH) represents the bulk of the Division's workload. Clinical trials are underway to further improve the service, including the day-case TUVRP (vaporisation resection of prostate) and medical therapy.

Haematuria

The Division of Urology, together with the Department of Diagnostic Radiology, run a day-case diagnostic haematuria clinic where patients with gross haematuria are provided with a one-stop service for prompt diagnosis and management.

Stone Surgery

The Jockey Club Lithotripsy Unit was established in June 1991 where patients with renal and ureteric stones can be treated with extracorporeal shock wave lithotripsy (ESWL). The Unit also provides ESWL service to patients from other Hospital Authority Hospitals. A detailed description of the Unit can be found in Chapter 6.

The Division also has a special interest in endourological treatment of urinary tract calculi. Excellent results have been reported and published in international journals of high repute by the Division on the treatment of ureteric calculi with ureterorenoscopic laser lithotripsy (URSL). More than 60% of patients with ureteric calculi are treated by URSL in TWH as day-patients. The success rate achieved is over 90%.

RENAL TRANSPLANTATION

QMH is a designated renal transplantation centre. The renal transplantation and

Special Clinics Run by the Division

<i>Special Clinic</i>	<i>Location</i>
General urology	QMH/TWH
Special urology including uro-oncology	QMH
Stone clinic	QMH
Neuro-urology & Voiding dysfunction clinic	QMH
Male infertility clinic	QMH
Andrology / erectile dysfunction clinic	QMH

Table 1

Meetings Organised by the Division

<i>Meeting</i>	<i>Frequency</i>
Renal transplantation and Dialysis Meeting	Biweekly
Uro-oncology meeting	Biweekly
Uro-radiology meeting	Biweekly
Uro-pathology meeting	Monthly
Division meeting	Weekly
Urology teaching rounds	Weekly

Table 2

haemodialysis services of the Division have been integrated with the Nephrology Division of the Department of Medicine, University of Hong Kong, to provide a combined renal transplantation (both cadaveric and living related programmes) and dialysis service.



Renal transplant - recipient operation

UROLOGIC ONCOLOGY

The Division provides comprehensive surgical management of all cancers of the genito-urinary tract. In addition, a biweekly uro-oncology conference is held in collaboration with the Department of Radiotherapy and Oncology for joint patient care.

VOIDING DYSFUNCTION

Full video-assisted urodynamic study to facilitate diagnosis and management is available to patients with suspected voiding dysfunction. A special voiding dysfunction clinic is held weekly for patient assessment and subsequent follow-up at our Queen Mary Hospital Specialist Clinic.

SPINAL INJURIES

The Division runs a weekly neurourology clinic in QMH. In addition, it conducts ward rounds in the MacLehose Medical Rehabilitation Centre, which is one of the three centres for spinal injury rehabilitation in Hong Kong.

MALE INFERTILITY / ERECTILE DYSFUNCTION

The Division holds special clinics at the Queen Mary Hospital Specialist Clinic for the comprehensive assessment of patients with male factor infertility and erectile dysfunction.

RESEARCH

The Division actively participates in both clinical and laboratory-based research. Current research interests include:

- BPH management
- Haematuria diagnostic service
- Treatment of ureteric stones (day surgery URSL)
- Detection of bladder cancer recurrence
- Urologic oncology, management of prostate cancer
- Access for dialysis
- Male factor infertility
- Treatment of erectile dysfunction
- Pelvi-ureteric junction obstruction
- Urethral sphincter function

COLLABORATIONS

Community Urology Centre

The Geriatric Urology Centre in TWH, funded by a generous donation from The SK Yee Foundation opened in 2001. The Centre was established with the growing geriatric population of Hong Kong in mind; a comprehensive one-stop urology service will be provided to the elderly.

Renal Transplant and Dialysis Service

The first renal unit in Hong Kong was established in late 1960s in QMH under the care of the Department of Surgery, and the first renal transplant operation in Hong Kong was performed in QMH in 1969. Currently, the renal transplant and haemodialysis services are under the joint management of our Division and the Nephrology Division of the Department of Medicine. In addition, the Nephrology Division also runs a peritoneal and haemodialysis programme with over 530 patients from both QMH and TWH.

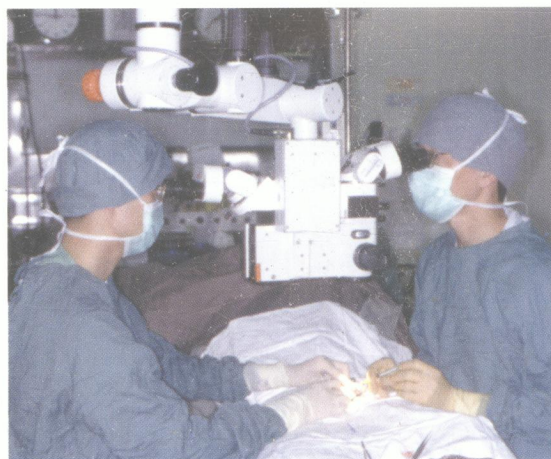
The first laparoscopic donor nephrectomy performed in Hong Kong took place on 4 October 2001 in QMH.



Laparoscopic donor nephrectomy

Assisted Reproduction Programme

The Division of Reproductive Medicine, University Department of Obstetrics and Gynaecology, runs one of the largest assisted-reproduction programmes in Hong Kong. An average of 500 assisted-reproduction treatment cycles are performed each year, of which about 60 cycles will necessitate surgical sperm retrieval. Currently, all the surgical sperm retrieval procedures, including micro-surgical epididymal sperm aspiration, are performed by the Division. The programme is recognised by the Royal College of Obstetricians and Gynaecologists for subspecialty training in reproductive medicine.



Microsurgical sperm retrieval operation

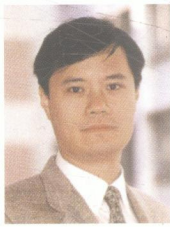
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- **Cheung MC, Lee FCW, Yip SKH, Tam PC.**
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- **Cheung MC, Lee FCW, Tam PC.**
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- **Yip SKH, Peh WCG, Tam PC, Li JHC, Lam C.**
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- **Yip SKH, Peh WCG, Tam PC, Li JHC, Lam CHC.**
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- **Yip KH, Lee FCW, Tam PC.**
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- **Yip KH, Peh WCG, Tam PC.**
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- **Choi YF, Tam PC.**
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- **Leung YL, Lee FCW, Tam PC.**
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- **Yeung Y, Cheung MC, Chan GSW, Cheung ANY, Tam PC.**
Primary actinomycosis mimicking urachal carcinoma.
Urology 2001;58(3):462i-iii.



Division of Vascular Surgery

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Division Chief

Albert Chi Wai TING MBBS, FRCS(Edin), FCSHK, FHKAM(Surg)
Senior Medical Officer

Jacqueline Pei HO MBBS, FRCS(Edin)
Medical Officer

Bernice Lai Yee CHEUK BSc, PhD
Post-doctoral Fellow

ACTIVITIES AND SERVICES

The Division of Vascular Surgery was founded in 1990 to provide a comprehensive in-patient service for patients with vascular disease. Our Division is the first and only independent full time vascular surgery specialty in Hong Kong that is dedicated to the management of patients with peripheral vascular disease. The current staffing component comprises of two surgeons, two senior residents and one resident.



The Vascular Laboratory

The Division performs complicated arterial reconstructive procedures on three whole-day operating sessions per week,

including suprarenal and thoracoabdominal aneurysm repairs, carotid endarterectomy and distal bypasses. Other procedures, including surgery for venous insufficiency, account for approximately 30% of the Division's operating schedule. Endovascular intervention has also been expanding rapidly, and is now one of the major activities of the Division.

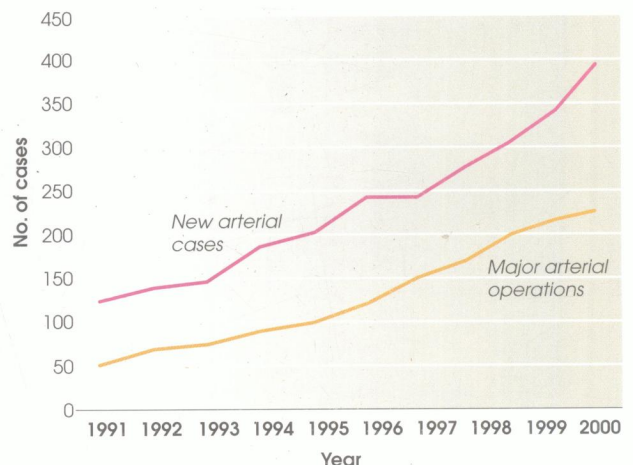
Since 1976, a Vascular Out-patient Clinic has been established at Queen Mary Hospital, and which has remained the only specialist clinic of this kind in Hong Kong. Statistics showed that a total number of 6814 patients benefited from this service in 2000 alone. Furthermore, since 1986, this service has been supported by a fully equipped Vascular Laboratory – once again, the only one of its

kind in Hong Kong. Statistics showed that a total number of 6814 patients benefited from this service in 2000 alone. Furthermore, since 1986, this service has been supported by a fully equipped Vascular Laboratory – once again, the only one of its



Research at the Vascular Laboratory

New Arterial Cases & Major Arterial Operations

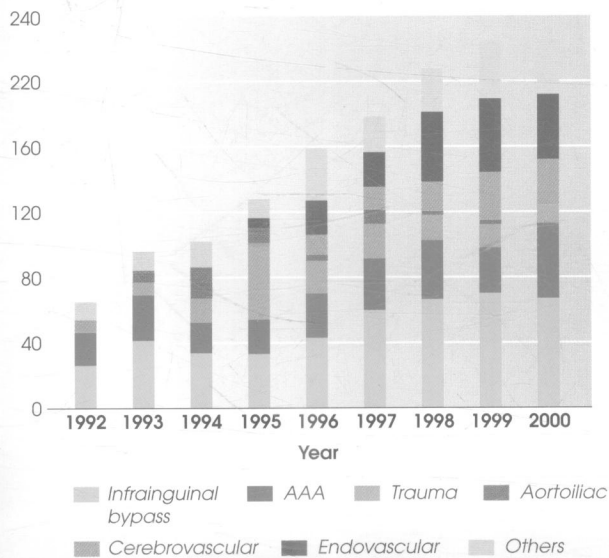


kind in Hong Kong. This laboratory is staffed by two Registered Vascular Technologists, one clerical and two research personnel.

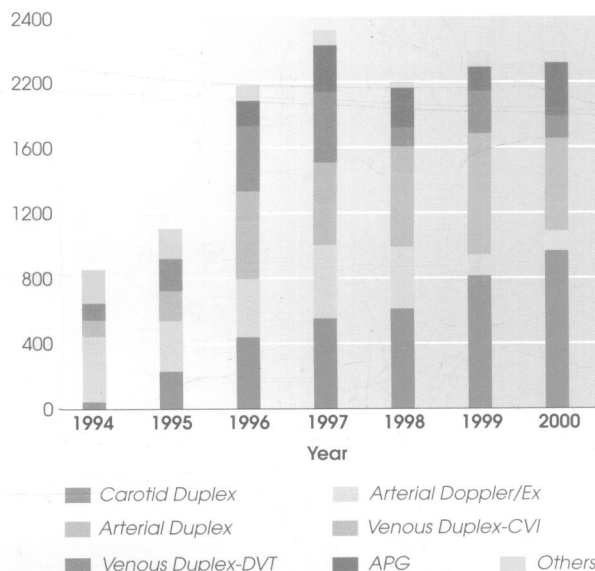
The laboratory provides the latest non-invasive diagnostic facilities for carotid,

peripheral arterial and venous disease. At present, almost 3500 examinations are performed annually in addition to 500 biochemical analyses for risk factor management.

Major Arterial Operations 1992–2000



Vascular Laboratory Studies 1994–2000



Diagnostic Procedures Available in the Vascular Laboratory

Cerebrovascular evaluation

- Carotid, vertebral and subclavian duplex scanning, Transcranial doppler

Arterial imaging studies

- Lower and upper extremity arterial duplex evaluation, bypass graft duplex evaluation

Arterial non-imaging studies

- Lower extremity arterial segmental pressures and waveforms
- Lower extremity exercise test
- Digital arterial evaluation +/- cold challenge test

Venous imaging studies

- Upper and lower extremity venous duplex evaluation
- Saphenous vein mapping

Venous non-imaging studies

- Strain gauge plethysmography
- Venous reflux evaluation by photoplethysmography

Abdominal examinations

- Renal artery and kidney parenchymal blood flow duplex
- Aorto-iliac duplex evaluation for stenosis and aneurysms
- Inferior vena cava and iliac vein duplex evaluation

STRENGTHS AND DEVELOPMENTS

In recognition of the growing needs for the specialty, the Francis Tien Vascular Disease Centre was established in 1996. The Centre is committed to providing the highest medical care in the specialty, promotion of patient education as well as prevention and vascular medicine research.

The Division has established an enviable reputation for its achievements in vascular surgery in the following clinical areas.



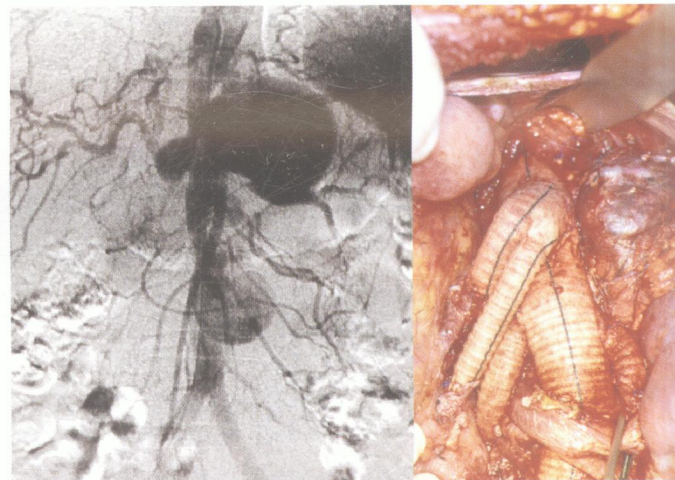
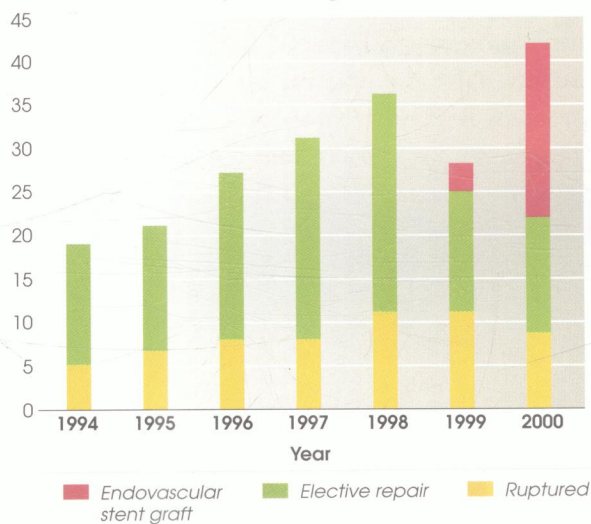
Entrance to the Francis Tien Vascular Disease Centre

AORTIC ANEURYSM SURGERY

The Division regularly performs about 50 aortic aneurysm repairs per year, including complex thoraco-abdominal aneurysms with visceral and renal reconstruction. The elective

mortality over the past 4 years has been consistently less than 3%. The Division also receives emergency referrals for reputed aneurysms from all over Hong Kong.

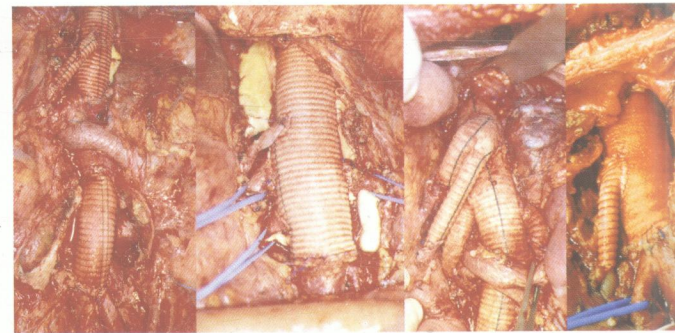
Aortic Aneurysm Surgery



Mycotic pseudoaneurysm



Marfan's thoracoabdominal dissecting aneurysm



Visceral reconstructions

ENDOVASCULAR AORTIC STENT GRAFT

The division pioneered this new treatment for patients with aortic aneurysms, dissection and trauma. The provision of overseas training for our staff together with invited expertise from Europe, Australia and the U.S.A. have enabled the Division to remain the leader in this area of Vascular Surgery. A total of 40

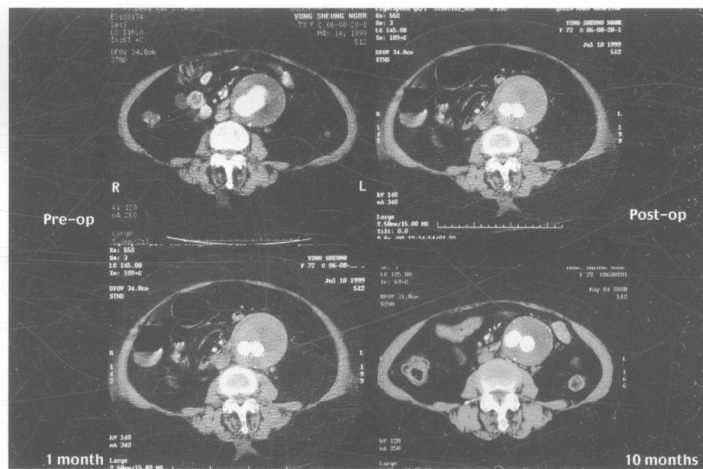
endografts have been implanted up to 2001. These include 35 endografts for abdominal aortic aneurysms (elective and rupture), and five for distal aortic arch and descending thoracic aorta for aneurysms, aortic transection, and pseudo-aneurysms with esophageal fistula.



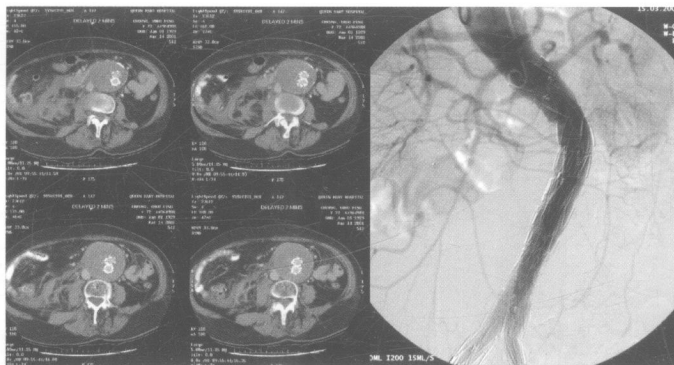
Endovascular stent graft for AAA



Endoluminal thoracic aortic stent graft



Endovascular stent graft for AAA



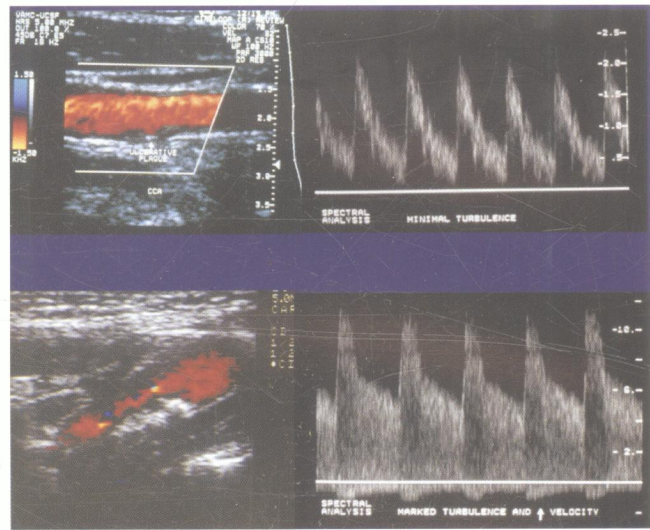
Endovascular repair of ruptured AAA



Endovascular repair: thoracic aneurysm

CAROTID SURGERY

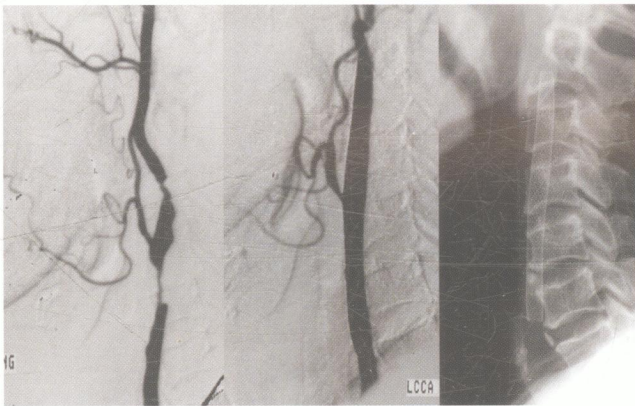
The carotid artery surgery programme is held in cooperation with the Division of Neurosurgery and Neurology. Approximately 30 carotid endarterectomy procedures are performed annually, with a stroke rate of less than 3%. The Vascular Laboratory also offers a surveillance and screening programme for patients with carotid stenosis using colour flow duplex scanning. At present, approximately 1000 carotid artery duplex scans are performed annually.



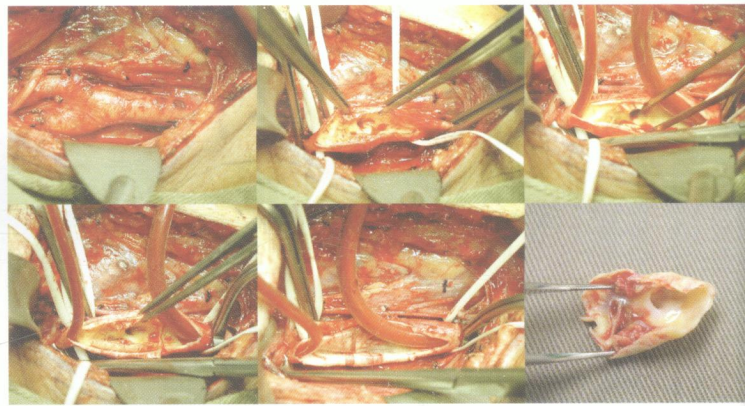
Carotid stenosis: Colour Flow Duplex

Carotid Duplex scan

Carotid angioplasty and stenting are offered for high-risk patients.

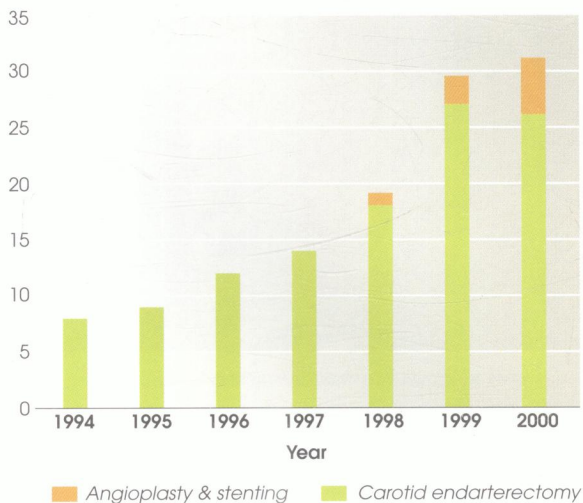


Angioplasty and stenting for postirradiation carotid stenosis

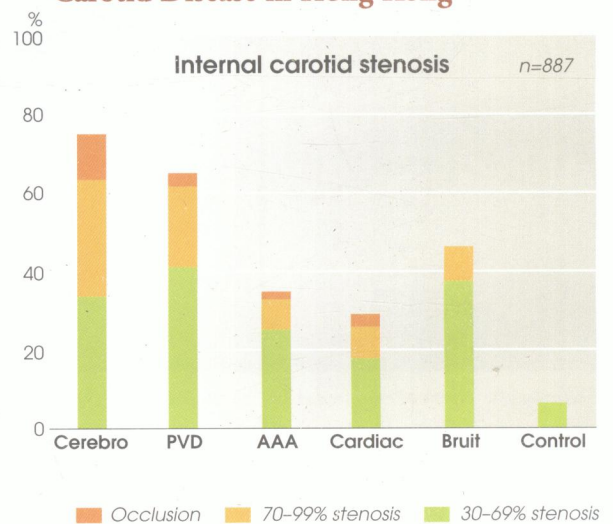


Carotid endarterectomy

Carotid Surgery

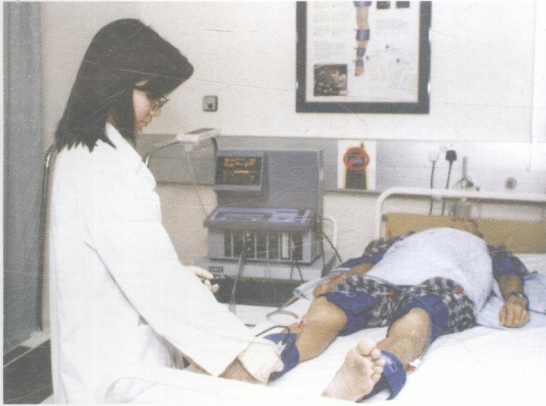


Carotid Disease in Hong Kong



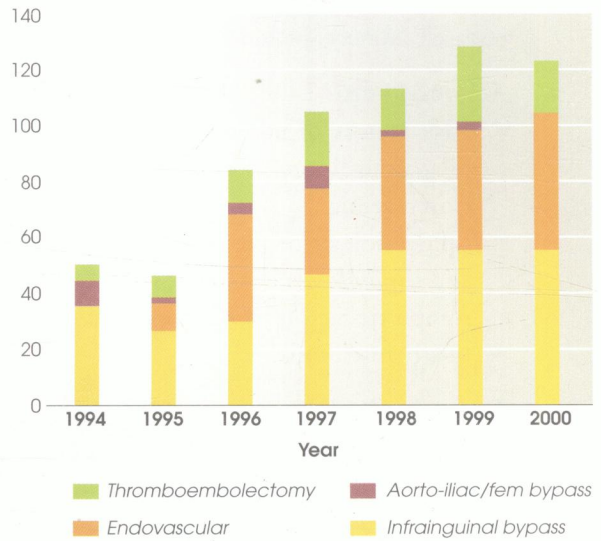
LOWER LIMB ARTERIAL SURGERY

Arterial bypass and endarterectomy are performed for lower limb chronic arterial occlusive disease, including distal pedal bypass. Around 70 lower limb revascularisation operations are performed annually.



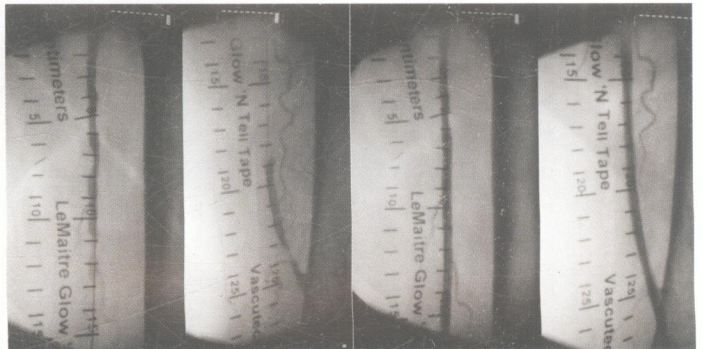
Lower limb arterial evaluation

Lower Limb Revascularisation



ENDOVASCULAR SURGERY

The Division pursues an active endovascular programme, which has benefitted from an operating theatre equipped with fluoroscopy and angiographic table facilities, offering balloon angioplasty and stenting for iliac and femoral occlusive diseases, either percutaneously or simultaneously with distal revascularisations. Up to 2000, more than 250 primary angioplasty and stenting procedures for lower limb ischaemia have been performed. Other related programmes include percutaneous insertion of IVC filters, and percutaneous aortic fenestration for complications of aortic dissection.



Superficial femoral angioplasty and stenting

VENOUS SURGERY

This includes traditional operations for varicose veins and chronic venous insufficiency; ultrasound localisation of venous reflux; quantitative evaluation of venous insufficiency using air plethysmography; and Subfascial Endoscopic Perforator Surgery (SEPS).



Air-Plethysmography for a patient with chronic venous insufficiency

RESEARCH

The Division actively participates in both clinical and laboratory research. Current research interests include:

Atherosclerosis

- Risk factors of atherogenesis, in particular, related to lipoprotein (a) and hyperhomocysteinaemia.
- Epidemiology of peripheral vascular disease and survival.
- Apoptotic factors of macrophages in relation to atherosclerosis.

Endovascular Surgery

- Endovascular treatment of peripheral vascular disease.

Carotid Disease

- Carotid stenosis epidemiology in Chinese.
- Carotid stenosis and stroke - risk stratification and plaque morphology by digital image analysis.
- Irradiation-induced carotid disease.

Aortic Aneurysms

- Endovascular aortic stent grafts.
- Pathogenesis of aortic aneurysms, at a molecular level, in particular integrins and infection.

Venous Disease

- Quantitative assessment of venous insufficiency.
- Deep vein thrombosis incidence and screening in Chinese.

COLLABORATIONS

Our Division is involved in several inter-departmental collaborations in vascular medicine, including the K.K. Leung Diabetic Centre as well as with the Division of Cardiology in the Department of Medicine. In collaboration with the Department of Radiology, the Division has successfully developed a carotid angioplasty and stenting programme that is now used to treat clinically inaccessible carotid stenosis and high-risk patients. A close collaboration has also been established with the Division of Cardiothoracic Surgery to provide carotid screening as well as carotid endarterectomy concurrent with

coronary bypass grafts and endoscopic treatment of thoracic trauma and aortic dissection complications.

Furthermore, the Division also offers the benefit of its expertise to other specialists, such as chiropodists, orthopaedic surgeons, neurosurgeons, intervention radiologists, prosthetists, and dietitians as well as to the rehabilitation services. This, together with other supportive and educational services that are readily available in Queen Mary Hospital, have helped to establish it as the best centre for peripheral vascular disease in Hong Kong.

TEN REPRESENTATIVE PUBLICATIONS OF THE DIVISION

- **Cheng SWK, Fok M, Wong J.**
Infected femoral pseudoaneurysms in intravenous drug abusers. **Br J Surg** 1992;79:510-2.
- **Cheng SWK, Ellis WV, Stoney RJ.**
Thoracic outlet syndrome: supraclavicular approach.
In: Dudley H, Carter D (eds), Rob & Smith's Operative Surgery: Vascular Surgery, 5th edition.
Chapman & Hall Medical 1993: 475-82.
- **Cheng SWK, Stoney RJ.**
Supraclavicular reoperation for neurogenic thoracic outlet syndrome.
J Vasc Surg 1994;19:565-72.
- **Cheng SWK, Ting AWC, Wong J.**
Fasting total plasma homocysteine and atherosclerotic peripheral vascular disease.
Ann Vasc Surg 1997;11:217-23.
- **Cheng SWK, Ting ACW, Lau H, Wong J.**
Lipoprotein (a) and its relationship to risk factors and severity of atherosclerotic peripheral vascular disease.
Eur J Vasc Endovasc Surg 1997;14:17-23.
- **Cheng SWK, Ting ACW, Lau H, Wong J.**
Immediate stenting for iliofemoral occlusive lesions: A surgeon's early experiences.
J Endovasc Surg 1999;6:256-63.
- **Cheng SWK, Wu LLH, Ting ACW, Lau H, Lam LK, Wei WI.**
Irradiation-induced extracranial carotid stenosis in patients with head and neck malignancies.
Am J Surg 1999;178:323-8.
- **Ting ACW, Cheng SWK, Wu LLH, Cheung GCY.**
Changes in venous hemodynamics after superficial vein surgery for mixed superficial and deep venous insufficiency.
World J Surg 2001;25:122-5.
- **Cheng SWK, Ting ACW, Wong J.**
Endovascular stenting of superficial femoral artery stenosis and occlusions: results and risk factor analysis.
Cardiovasc Surg 2001;9:133-40.
- **Cheng SWK, Ting ACW.**
Lipoprotein (a) level and mortality in patients with critical lower limb ischaemia.
Eur J Vasc Endovasc Surg 2001;22(2):124-9.



Centre for Education & Training

STAFF



Prof. Htut SAING

Htut SAING *MBBS, FRCS(Edin), FACS, FAAP, FCSHK, FHKAM(Surg)*
Director

Nivritti Gajanan PATIL *MBE, MBBS, MS, FRCS(Edin), FCSHK, FHKAM(Surg)*
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Assistant Director

Gilberto Ka Kit LEUNG *MBBS, FRCS(Edin)*
Assistant Director

Henry Han Lee TUEN *MBBS, LMSSA(London)*
Assistant Director

Elaine CHAN *BA, MSc*
Administration Manager

Alcina Chui Yin CHAN *BA, MA(Macq)*
Administrative Assistant

ACTIVITIES AND SERVICES

The Department of Surgery is unique in having the only centre in the region that is wholly devoted to surgical education at both undergraduate and postgraduate levels. The Centre for Education & Training (CET) has grown from its modest beginnings as a 3-man division to become a centre of educational excellence involving a group of enthusiastic and devoted educators from various surgical specialties.



CET members in 2002. Back (left to right) Dr. RTP Poon, Dr. HHL Tuen, Dr. GKK Leung, Dr. JHP Chung. Front (left to right) Dr. CY Lo, Dr. NG Patil, Prof. H Saing, Dr. LWC Chow, Dr. KM Chu

The introduction of the New Medical Curriculum (NMC) in 1997 saw the responsibilities of the centre extend far beyond the field of surgical education. The CET is now actively involved in the process of planning and implementation of the new student-centred, integrated, problem-based curriculum. Members of CET are also the members of the Undergraduate Education Committee (UEC) of the Faculty of Medicine and hold important portfolios.

The CET meets formally every week to discuss various matters related to the curriculum, including: clerkships, assessment, monitoring, evaluation, examinations, skills courses, staff and students consultative meetings, orientation and mentorship



OSCE - Gowning and gloving

programmes, visits to network hospitals, faculty affairs, workshops, student journal reviews, protected-time teaching, and

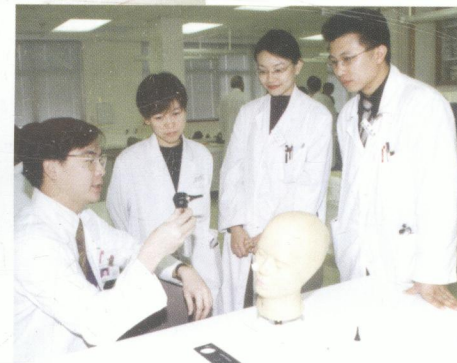


Practical Skills Workshop

post-graduate education.

Formal and informal meetings and reporting to the senior staff take place throughout the year. Professor John Wong, Head of the Department of Surgery takes an active interest in CET activities as well as the

teaching programmes of the Department and the Faculty. The Department also acts as a "host" department for the crucial third year of the NMC, with our nominee acting as the programme director.



UNDERGRADUATE TEACHING

At the undergraduate level, the development and implementation of the NMC at The University of Hong Kong have



Problem-based learning session in progress

brought about massive changes in how we teach and how students learn (See box on page 80). Our aim is to produce competent caring doctors with an ability to communicate and also to be imbued with a realisation of the value and necessity for lifelong learning, a vital philosophy that we hope will stay with them throughout their careers.



Bedside Teaching



The first two years of the New Medical Curriculum begin with Introduction to Health and Disease followed by System-Based Blocks. The third and fourth years take the students through the Integrated Block based on life-cycle events, followed by Junior (Phase I), Senior (Phase II) and Specialty (Phase III) Clerkships.

The junior surgical clerkship in Phase I includes problem-based learning (PBL), bed-side teaching and teaching clinics primarily. The teaching of surgery during the senior clerkship (Phase II) occurs at the network hospitals, namely Queen Elizabeth Hospital, Kwong Wah Hospital, Caritas Medical Centre and Ruttonjee Hospital.

The specialty clerkship in Phase III has six rotations, each lasting for eight weeks. These rotations also have a dedicated time for primary care practice and ambulatory surgery.

The New Medical Curriculum brought about major changes to the assessment structure, with the introduction of integrated written tests, Objective Structured Clinical Examinations (OSCEs), continuous assessment, and formative and summative clinical examinations. Continuous assessment is based on documentation in the student logbook. Many of these methods of evaluation had been used in the Department long before the implementation of NMC but the restructuring of the curriculum for the entire training programme formalised these innovations throughout the Faculty of Medicine. In the Department of Surgery, the CET holds regular consultative meetings with both students and teachers to obtain feedback and to make "short loop" changes when appropriate.



Outstanding Phase III (Speciality Clerks) students with senior staff after award of certificates

POSTGRADUATE TEACHING

Postgraduate teaching, for professional qualifications, is a fundamental component of the teaching programme in the Department of Surgery. It is undertaken mainly at QMH and network hospitals. Structured clinical rotations in various specialties form an important aspect of training for both pre- and post-fellowship levels. Individual specialty divisions supervise and assess the skills, knowledge and attitude of trainees at regular intervals. The review of these assessments is presented and discussed at senior staff meetings to monitor and suggest improvements, and to recognize achievement. Each trainee has a senior staff member as a mentor who has a closer personal relationship

and who helps to provide guidance in all aspects of training.

Trainees are expected to attend and make presentations at Research Meetings, X-ray Reviews, Journal Reviews, Grand Rounds, and Census Meetings. Research and Census Meetings take place weekly. A protected time is allocated every week to all trainees for assignments and supervised learning in preparation for Membership (MRCS/MCSHK) and Fellowship (FRCS(Edin)/FCSHK) examinations. Each trainer of the Department takes turns in the formal teaching of trainees through bedside teaching, tutorials, operative viva and research discussions once a week throughout the year. Tutorials by Visiting Professors are also arranged. Mock examinations are organised for all candidates in the Department before their fellowship examinations.

Courses in Basic and Advanced Surgical Skills and Advanced Trauma Life Support, which have become an essential requirement for fellowship training, are organised in The Jockey Club Skills Development Centre. The Department of Surgery also initiated, in collaboration with other departments, a course in basic sciences in surgery. These courses are open to all trainees, from both local and regional institutions.

RESEARCH

CET members are involved in research projects related to medical education in addition to their surgical specialities, and have presented widely on such topics as the Objective Structured Clinical Examination (OSCE), skills courses and problem-based learning in the wards

and in surgery. Curriculum planning at regional and international conferences devoted to surgical and medical education is another area in which CET members are active. CET members are also international editors to journals that are devoted to research in both medical education and clinical specialties.

TEN REPRESENTATIVE PUBLICATIONS BY CET MEMBERS

- **Saing H, Chan JKF, Lam WWH, Chan KL.**
Virtual intraluminal endoscopy: a new method for evaluation and management of choledochal cyst. *Journal of Pediatric Surgery* 1998;3(11):1686-9.
- **Saing H, Fan ST, Chan KL, Wei WI, Lo CM, Mya GH, Tsoi NS, Yuen KY, Ng IOL, Lo JWR, Chau MT, Tsoi WK, Chan J, Wong J.**
Liver transplantation in children: the experience of Queen Mary Hospital, Hong Kong. *Journal of Pediatric Surgery* 1997;32(1):80-3.
- **Saing H, Fan ST, Chan KL, Wei WI, Mya GH, Lo CM, Cheng W.**
Treatment of biliary atresia by portoenterostomy and liver transplantation: the Queen Mary Hospital, Hong Kong experience. *Tohoku Journal of Experimental Medicine* 1997;181(1):109-16.
- **Saing H, Han H, Chan KL, Lam W, Chan FL, Cheng W, Tam PKH.**
Early and late results of excision of choledochal cysts. *Journal of Pediatric Surgery* 1997;32(11):1563-6.
- **Saing H, Mya GH, Cheng W.**
The involvement of two or more systems and the severity of associated anomalies significantly influence mortality in esophageal atresia. *Journal of Pediatric Surgery* 1998;33(11):1596-8.
- **Saing H, Fan ST, Chan KL, Lo CM, Wei WI, Tsoi NS, Yuen KY, Ng IOL, Chau MT, Tso WK, Chan JKF, Wong J.**
Liver transplantation in infants. *Journal of Pediatric Surgery* 1999;34:1721-4.
- **Saing H.**
Training and delivery of pediatric surgery services in Asia. *Journal of Pediatric Surgery* 2000;35(11):1606-11.
- **Patil NG, Wong J.**
Surgery in the "New" Hong Kong. *Archives of Surgery* 2001;136:1415-8.
- **Lam TP, Irwin M, Chow LWC, Chan P.**
The use of focus group interviews in Asian medical education evaluative research. *Medical Education* 2001;35:510-3.
- **Lam TP, Irwin M, Chow LWC, Chan P.**
Early introduction of clinical skills teaching in a medical curriculum – factors affecting students' learning. *Medical Education* 2002;36:233-40.



Research Laboratories

Over the past few years, research facilities of the Department of Surgery have grown from a few stand-alone laboratories to the present centralised research facility occupying a total of over 1800 m² in the Faculty of Medicine Building. The Department has eight major research laboratories in addition to core equipment rooms, tissue culture facilities, a histopathology laboratory, and tissue/ blood



Senior research staff of the Department in 2001

banks. To facilitate research and surgical skills training using animal models, the Department also has an Experimental (Animal) Surgery Laboratory. Furthermore, a number of satellite laboratories has been created in Queen Mary Hospital to provide clinical laboratory services to patients with vascular and hepatobiliary diseases.

Clinicians, scientists, postgraduate students, research assistants and technicians work closely on both applied and basic research that have direct surgical relevance.

Our research laboratories are well-equipped. Centralised core facilities harbour state-of-the-art equipment including an automated 16-capillary DNA sequencer,

DNA-chip microarray scanner, robotic micro-beam laser dissection system, real-time quantitative PCR machine, robotic nucleic acids work-station, flow cytometer, ultracentrifuge, and CellPharm 2000 bioreactor.

TISSUE CULTURE FACILITY

Three standard tissue culture rooms have been equipped with BSC class II culture cabinets, tissue culture incubators, microscopes, and cell storage systems. Currently, tumours and cells from patients with cancer are grown in the culture facility, and the efficacies of various anti-cancer drugs *in vitro* are tested. Using an *in vitro* anti-cancer drug testing system, we aim to design an effective anti-tumour drug treatment strategy tailor-made for individual tumours. In addition, tissue cultures are used for the production of active immunosuppressive proteins to be used in transplantation immunology studies in intestinal, cardiac, liver, and skin transplantation. Recombinant adenovirus is being produced to support the development of a novel viral mediated gene therapy strategy for the control of immune rejection in liver and cardiac transplantation.

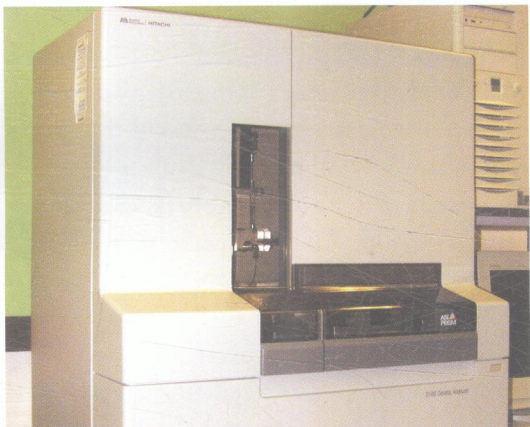


The Faculty of Medicine Building. Research laboratories are housed on the 9th and 10th floors

Research Staff of the Department (2001)

Position	Number of Staff
Associate Professor	1
Assistant Professor	1
Research Assistant Professor	3
Postdoctoral Fellow	6
Research Postgraduates (MPhil/ PhD)*	12-15
Research Assistants / Technicians	40

* Exclusive of: MMedSc, MS, DSc

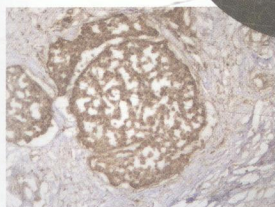
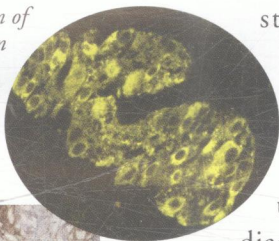


A 16-capillary automatic DNA sequencer. It is used to identify mutations and disease-associated single nucleotide polymorphisms (SNPs) in patients

HISTOPATHOLOGY LABORATORY

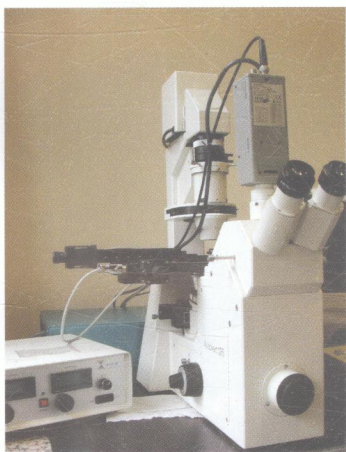
Almost all research projects have some form of involvement with this laboratory. Over one thousand surgical specimens from the operating theatres are sent each year to the laboratory for processing and sectioning.

Distribution of neurons in human gut as revealed by fluorescent immunohistochemistry



Fluorescent immunohistochemistry for studying the expression of heme-oxygenase in human gut

PALM laser capture microdissection system. A single cell can be dissected for molecular genetic analysis from a tissue section



prognosis of tumours in patients. Recently, we have been using antibodies against various tumour markers in the study of the mechanisms of tumour metastases. We are also evaluating the markers' usefulness in predicting tumour recurrence.

Organ grafts obtained from animal recipients undergoing different immuno-

Immunohistochemical staining using antibodies specific for tumour markers are being used for cancer diagnosis and the

MAJOR RESEARCH INTERESTS

- Cancers (liver, esophagus, gastric, colon, head & neck, brain, breast, endocrine, urological, childhood)
- Organ failure and gene therapy
- Transplantation immunology (liver, heart, gut)
- Cardiovascular diseases
- Cell adhesion molecules in surgical diseases
- Developmental molecular biology in the gut
- Stem cell biology
- Dendritic cell biology
- Functional genomics
- Genome-wide expression profiling of cancers by cDNA microarray
- Application of traditional Chinese herbal medicine in cancer therapy and control of immune rejection



The latest fully automatic nucleic acids work station for sample handling, preparation, and analysis



A microarray scanner used for genome-wide expression analyses of thousands of genes

suppressive treatments are processed for histology and immuno-histochemistry to quantify degrees of immune rejection of the grafts. This allows us to test the efficacy of different combinations of immuno-suppressants, and novel immuno-suppressive treatment strategies in the prevention of graft rejection and the induction of long-term graft tolerance.



Performing a tissue culture experiment at a Bio-Safety Cabinet

ANIMAL RESEARCH LABORATORY

The animal research laboratory, located on the 10th Floor of the Faculty of Medicine Building plays a very important role in the research programme of the Department. The facilities include two large and two small



Perfecting surgical skills in the Advanced Trauma Life Support Course

operating theatres. The two large theatres are equipped with anaesthetic and transfusion devices, and can accommodate six standard tables that allow several surgical teams to operate simultaneously. This is essential for organ transplantation experiments and surgical skills training courses.

Organ transplantation, including intestinal, liver, cardiac, and skin, practised on pig and rat, is frequently performed in the animal research laboratory. In other research, tumour cells, which have been isolated from cancer patients, or tumour cell lines are implanted into 'nude' (hairless) mice. With the tumours established in the nude mice, various individual, or combinations of, anti-tumour drugs can be tested for their efficacy in controlling tumour growth as well as eliminating the tumours. Using nude mice as tumour and animal transplantation models, Chinese herbs and other medicinal lead compounds are also being tested as an alternative anti-tumour therapy and in the amelioration of immune rejection in organ transplantation.

The health and welfare of the resident animals are taken very seriously. Ventilation

systems and animal cages are designed to attain the highest standard of care. Post-operative animals are looked after in "intensive care units" until they have completely recovered. Residents in the animal laboratory include pigs, rats, mice, nude mice, and rabbits. Some are immuno-competent and can easily become infected. These animals are either special genetically modified strains such as nude mice or are transplant recipients undergoing immuno-suppressant treatment in organ transplantation experiments. These immuno-competent animals are kept in a "minimal disease area".



A fluorescence activation cell sorting (FACS) system for immunological studies



A real-time quantitative PCR system used for disease diagnosis and monitoring of disease progression

RGC-funded projects (1997-2001)

Year	No. of Projects	Total Award (HK\$ M)
1997	2	1.33
1998	2	1.25
1999	3	2.46
2000	3	2.39
2001	2	1.78

TEN REPRESENTATIVE PUBLICATIONS FROM LABORATORY - BASED RESEARCH

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Special Service Centres

BREAST CENTRE

Located on the 5th floor of the Centennial Block of Tung Wah Hospital, the Breast Centre was established with the generous donation from the Tung Wah Group of Hospital Board of Directors. The primary objective of the Centre



Consultation with patients in progress

is to enhance the service provided to patients with breast lesions, in particular, breast cancer. The Centre is equipped with the Advanced Breast Biopsy Instrument for the diagnosis of early breast cancer. This sophisticated instrument not only can perform biopsy on impalpable lesions but also removes them en-bloc, thereby improving the diagnostic accuracy.

There are two designated nurses working in the Centre. Their responsibilities include the counselling of patients with newly diagnosed breast cancer as well as assisting in their management.

Within the Centre, there are consultation rooms for interviewing patients and relatives. There is also a conference room for meeting with family members to discuss management plans for patients with breast cancer. There is also a specially designed room equipped with multiple mirrors for the fitting of breast prosthesis for patients who underwent mastectomy.

BURN CENTRE

Location and facilities

The Burn Centre is located on Ward K16N, and has been specially designed with isolation room facilities for the management of severely burnt patients in order to prevent cross-infection. In addition, the Centre is also equipped with temperature-regulated surgical baths as well as spacious dressing rooms for the care of extensive and complicated wounds of patients with burns. There are eight beds in the



Special bath for patients with burns

Centre, however, if there is an increased demand for bed space, such as in the event of a disaster, the whole ward can be converted to accommodate a maximum of 25 patients.

Staff

The service is placed in the charge of staff of the Division of Plastic and Reconstructive Surgery, who are supported by a team of experienced and dedicated nurses.

Service scope

The Centre sees a wide range of different types and degrees of severity of burn injuries. In major burns, the strategy of staged management applies, which includes acute care, rehabilitation, and subsequent reconstruction. A multi-disciplinary approach is adopted, with the special involvement of various supporting specialists and care-providers. A Scar Management Clinic is held jointly with experienced occupational therapists for discharged patients.

Other special features

- A skin bank has also been incorporated in the Centre for the harvesting and storage of cryo-preserved donated human skin, which are used in the surgical management of major burn patients.
- The Centre holds the Advanced Burn Life Support course jointly with the Skills Development Centre of Queen Mary Hospital. The course provides training and continued education for medical and nursing staff who are involved in burn management.
- Since 2001, the Burn Centre has been designated by the Hong Kong Hospital

Authority as one of the two referral centres for the management of major or complicated burns in the territory.



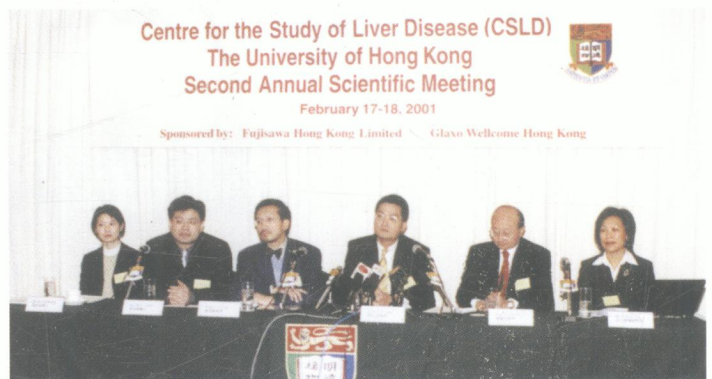
Skin Bank of the Burn Centre

CENTRE FOR THE STUDY OF LIVER DISEASE

Being the largest tertiary referral centre for liver diseases in Hong Kong, the Centre for the Study of Liver Disease (CSLD) bears the responsibility of achieving excellence in both clinical service and research. By convening experts in liver disease from various departments of the University, the CSLD aims at enhancing its research quality through this multi-disciplinary collaboration, and this has contributed to its improvement and achievements both within and outside of Hong Kong.

CSLD members have led the world's largest randomised trial of lamivudine, and the first-year results are encouraging. In 1998, these results were published, bringing the Centre to the forefront of hepatitis B treatment in the world. With intensive efforts made in clinical and laboratory research, the mortality rate of hepatic resection for liver cancer in Queen Mary Hospital has decreased to 0%, and the survival duration post surgery are among the longest in the world. Nowadays, nearly 80% of liver resections can be performed without the need for blood transfusion. In October 1991, members of the CSLD performed the first successful liver transplant in Hong Kong. Since then, the liver transplant service in Queen Mary Hospital has developed into the largest such programme in Southeast Asia and China and now ranks fourth in Asia. By the end of 2001, the number of liver transplants has increased to 50 per year and a total of 206 liver transplants

has been performed with excellent success rates. In 1996, the CSLD pioneered living donor liver transplantation for adult patients, especially those in high-urgency situations, using extended right lobe grafts. There has been no donor mortality since the inception of this technique. Such an innovative technique



Representatives of the CSLD at the press conference held after the Second Annual Scientific Meeting

provides an option to save the lives of desperately ill patients when cadaveric donors are scarce. This technique is now adopted by many liver transplant centres around the world to treat adult patients with terminal liver diseases. Intrahepatic stones and acute biliary pancreatitis are two other research areas in which members of the CSLD have excelled in. Great advances have been made in the management of these diseases and have contributed to significantly improved treatment results.

CHIANG CHEUNG CHUN FONG SURGERY DAY CENTRE

Chiang Cheung Chun Fong Surgery Day Centre caters to patients who require minor surgical operations or investigations that do not need hospitalisation. Patients are admitted to the Centre and are discharged on the same day after their procedure.

The Centre provides maximum patient convenience and comfort. After completing registration, patients proceed to undergo surgical investigations in modern up-to-date facilities. In keeping with the tasteful ambience, comfortable sofas and piped-in music help to create a relaxing environment. The medical and nursing staff form a cohesive team, providing

both clinical expertise and comprehensive patient care.

The Centre has single-bed, double-bed and five-bed cubicles. There are also comfortable seating areas for patients to rest before and after investigations or surgery. A special children's room is also available for our young patients.

Main activities of the Centre include chemotherapy, operations that can be performed under local anaesthesia, fibre-optic endoscopy investigations, CAT scans, X-ray investigations, assessment clinics as well as stoma and male clinics.

FRANCIS Y. H. TIEN VASCULAR DISEASE CENTRE

The Francis Y. H. Tien Vascular Disease Centre is dedicated to providing professional healthcare for patients with arterial and venous disorders. Its mission is to promote disease awareness, facilitate rehabilitation, and conduct vascular medicine research. Each patient is



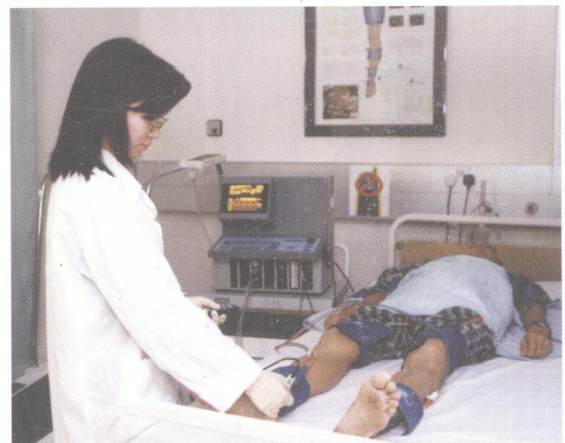
Research at the Vascular Laboratory

offered diagnosis and specialised treatment of vascular diseases following careful consultation and appropriate diagnostic examinations. The Centre includes a well-equipped vascular laboratory, where over 2,000 non-invasive examinations are performed annually.

Diagnosis of vascular diseases is facilitated by non-invasive examinations such as colour-flow duplex ultrasound and transcranial Doppler for cerebrovascular disease, segmental pressure and waveform analysis for lower limb atherosclerosis, and ultrasound / air-plethysmography for venous incompetence and



Air-Plethysmography for patients with chronic venous insufficiency



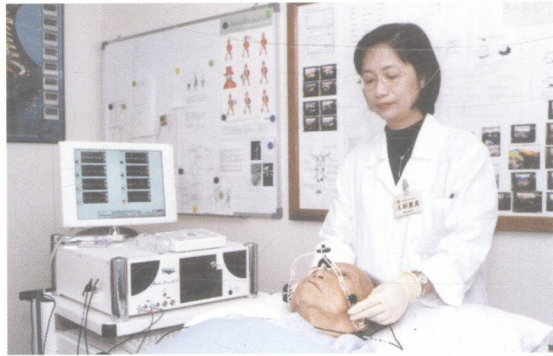
Vascular Diagnostic Workstation for lower limb arterial evaluation

obstruction. With an aging population and unhealthy living habits, the number of people with vascular diseases continues to rise in Hong Kong. Additional services include consultation clinics, peripheral vascular system diagnostics, counselling and risk assessment screening.

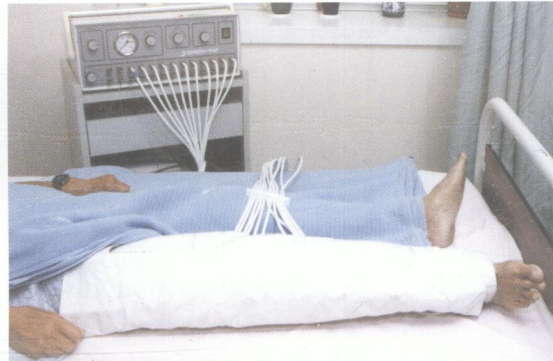
Treadmill exercise



Colour Duplex scanning for carotid arteries



Transcranial Doppler for intracranial arteries



Lymphopress for patients with lymphoedema

THE JOCKEY CLUB LITHOTRIPSY CENTRE

In June 1991, The Extracorporeal Shockwave Lithotripter Unit of Queen Mary Hospital was officially opened after it has been set up with a generous donation from The Hong Kong

during and after their treatment. In order to provide a "one-stop service", the follow-up of those patients receiving endourologic treatment for urinary tract stone disease is also conducted at the Centre.



Naming Ceremony of Jockey Club Lithotripsy Centre, 1996

Jockey Club. In 1996, the Unit received another donation from The Hong Kong Jockey Club and was renamed 'The Jockey Club Lithotripsy Centre'. The Centre serves not only patients of QMH, but also those from other hospitals including Ruttonjee Hospital, Pamela Youde Nethersole Eastern Hospital, Kwong Wah Hospital, North District Hospital and Our Lady of Mary Hospital.

The Centre is equipped with the Dornier MFL 5000 lithotripter to provide extracorporeal shockwave lithotripsy (ESWL) service (Table). With the help of fluroscopy and ultrasonography, urinary tract stones can be satisfactory located and fragmented. The Centre also benefits from having facilities that include a multi-function endourologic table. In addition to ESWL, endourologic procedures such as retrograde manipulation of stones by ureteric stent, ureteroscopic lithotripsy, or percutaneous nephrolithotomy can be performed at the Centre.

The Centre provides a day-care service and has four beds which allows patients to stay

Number of ESWL performed in QMH

Year	Number of ESWL performed
1996	1156
1997	1202
1998	1070
1999	1131
2000	1357

Table



Extracorporeal shockwave lithotripsy in progress

The Centre also actively pursues research excellence and current research interests include:

- Efficacy of ESWL in the treatment of ureteric stones
- Outpatient ureteroscopy for the treatment of ureteric stones
- Use of patient-controlled anaesthesia as pain relief during ESWL
- Methods of following up patients after ureteric stone clearance by ESWL

SURGERY ENDOSCOPY CENTRE

The endoscopy centre has undergone significant changes since its inception in 1993. From being a general ward area, the present suite in B5 is now the dedicated endoscopy centre. At present, there are three endoscopy procedure rooms. The Centre is equipped with X-ray facilities, one laser therapy room, one gastrointestinal motility study room, as well as one ultrasonographic and interventional study room. There is also a small laboratory where urea breath tests can be performed. The centre has over fifty endoscopes (including fiberoptic and video endoscopes) that cater to the different needs of the gastrointestinal, biliary, respiratory and urological systems.

Endoscopic procedures are performed or supervised by senior staff in the appropriate subspecialty of the Department. This set up is

unique in Hong Kong, and achieves results, in terms of accuracy and success, that are among the best in the world. Nursing staff of our endoscopy centre are specialty nurses who normally work for a period of one to two years. This helps to maintain a high level of nursing

support in the endoscopy service. In December 2001, the nursing staff presented two posters at the Quality Improvement Forum held in our hospital on the topic of "OPA disinfection of endoscopes and centralization of disinfection of endoscopes in endoscopy units".

The workload of our endoscopy centre is heavy; around 12,000 procedures are performed annually. This figure represents two-thirds of all endoscopy procedures performed in Queen Mary Hospital. The Table summarises the types of endoscopy performed in 2001.



Performing an oesophagogastroduodenoscopy at the Surgery Endoscopy Centre

Endoscopies Performed in 2001

Procedure	In Patient	Out Patient	Sub Total
Bronchoscopy	716	82	798
Cholangiogram	76	2	78
Choledochoscopy	6	1	7
Colonoscopy	1460	46	1506
ENT Exam	2	16	18
Enteroscopy	1	0	1
ERCP	646	4	650
EUS Biliary tract & pancreas	14	0	14
EUS Colon	1	0	1
EUS Oesophagus	3	0	3
EUS Rectum	19	6	25
EUS Stomach	182	59	241
Flexible Cystoscopy	214	477	691
FNA	248	235	483
Laryngoscopy	19	49	68
Nasoendoscopy	39	187	226
Nasopharyngoscopy	23	43	66
Oesophagoscopy	43	38	81
OGD	2894	1845	4739
Otoscopy	1	4	5
Panendoscopy	337	209	546
Proctoscopy	15	8	23
PTBD	11	0	11
Rhinscopy	3	2	5
Sigmoidoscopy	462	705	1167
Ultrasound	287	217	504
Urea Breath Tests	10	492	502
Total	7732	4727	12459

Table

The Centre is striving for higher standards in the management of this subspecialty; we are the first endoscopy centre under the Hospital Authority of Hong Kong SAR to use OPA to disinfect our endoscopes. The Centre has also made contributions to the Quality Improvement Team of the hospital by introducing documentation of endoscopic procedures - a practice that has been adopted by the hospital.

In addition, the Centre aims to advance knowledge in this field. Journal articles published by staff of the Centre include the following subject areas:

- Somatostatin prophylaxis of post-ERCP pancreatitis
- Endoscopic ultrasound in acute pancreatitis
- Early and delay ERCP in acute cholangitis
- Early ERCP for acute pancreatitis

- Different types of metallic stents for esophageal tumour palliation
- Esophageal manometric studies
- Use of metallic stents in acute colonic obstruction
- Familial hereditary colonic polyposis registry
- Manometric and bowel function studies after low anterior resection
- Urea breath tests and *H. pylori* studies for peptic ulcers
- Regional chemotherapy for advanced carcinoma of stomach

The Endoscopy Centre continues to function as a training ground for both medical and nursing staff in this clinical subspecialty. It is the aim of the Centre to continually strive for improved patient care and facilities.



The Jockey Club Skills Development Centre



STAFF

<i>Centre Director :</i>	Dr. Chung Yau LO
<i>Course Director (Nursing Education) :</i>	Miss Wendy FONG
<i>Program Manager :</i>	Ms. June CHAN
<i>Course Administrators :</i>	Mr. Lobo YAU
	Miss Emily HUI
<i>Technician :</i>	Mr. Ricky LAI

Advisory Board

<i>Chairman :</i>	Professor John WONG
<i>Members :</i>	Professor Sheung Tat FAN
	Professor John LEONG
	Professor William WEI
	Dr. Chin Hung CHUNG
	Dr. York CHOW
	Dr. James HWANG
	Dr. Chung Yau LO
	Dr. Francis MOK
	Dr. Lina ONG
	Dr. Andrew YIP

CLINICAL SKILLS DEVELOPMENT

One of the fundamental factors in the provision of excellent patient care is the possession by the medical personnel of satisfactory technical skills. Practical skills are still largely acquired on an apprenticeship basis through assisting experienced surgeons and through practising on patients. These practical skills are acquired in the wards or in the operating theatre in an ad hoc manner, usually in emergency and stressful situations, and inevitably, errors are perpetrated on patients in the learning process. Furthermore, changes in health care, with shorter in-patient stays, mean that required skills are becoming progressively more difficult to learn and to teach in the traditional way. Training has often been fragmentary and episodic.

One way of providing clinical skills training in a controlled environment, where practice and assessment can take place, is in a clinical skills laboratory. Doctors and nurses can develop and improve their clinical skills by participating in workshops that combine the use of animal organs, training mannequins, computer-aided learning programmes and videotapes. The proficiency of doctors and nurses can be evaluated and subsequently confirmed in the clinical setting.

FACILITIES

In November 1996, with a generous grant from the Hong Kong Jockey Club Charities Trust, the Department established a Skills Development Centre, to evaluate and train surgeons and nursing staff in a laboratory setting. The Centre, located in C3 of Queen Mary Hospital, is approximately 250 m² in size



Inaugural PHTLS course in 1999

and houses a laboratory with facilities for up to 48 surgeons to train in procedures ranging from simple-knot tying to laparoscopy and thoracoscopy. The Centre also has a 60-seat seminar room – equipped with audio-visual



Participants in the Care of the Critically Ill Patient Course, November 2001

links to the operating theatres, an endoscopic unit for live demonstrations, and video viewing library with six stations for lectures, demonstrations, group discussions and evaluations.

PROGRAMMES AND SERVICES

From November 1996 to June 2001, the Centre had organised more than 200 training courses and live demonstrations for doctors, nurses and pre-hospital personnel from Hong Kong and overseas. In addition, between 1997 and 1999, a total of 19 training courses had been conducted for undergraduates.

Training courses offered at the Centre on a regular basis are :

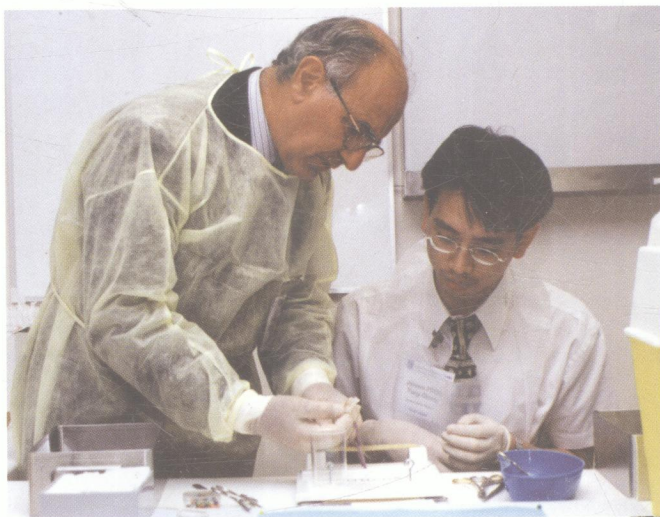
- Advanced Burn Life Support Instructors Course
- Advanced Burn Life Support Providers Course
- Advanced Course in Laparoscopy for Theatre Nurses
- Advanced Course in Surgery
- Advanced Endoscopic ring Technique Course
- Advanced Study Institute Course
- Advanced Surgical Skills Course
- Advanced Trauma Care for Nurses Instructor Course

- Advanced Trauma Care for Nurses Provider Course
- Advanced Trauma Life Support Instructors Course
- Advanced Trauma Life Support Student Course
- Basic Course in Neurosurgery for Theatre Nurses
- Basic Endoscopic Surgery Course



Advanced Trauma Life Support Course

- Basic Surgical Skills Course
- Basic Surgical Skills Workshop for Surgical Interns
- Basic Theatre Technique for Theatre Nurses Course
- BPH Interstitial Laser Coagulation Workshop
- Care of the Critically Ill Surgical Patient Course



Basic Surgical Skills Course





ATLS: Triage Scenario Discussion

- Cuschieri's Advanced Endoscopic Surgery Course
- Endourology for Theatre Nurses Course
- ENT Surgery Course for Theatre Nurses
- Head & Neck Surgery Course for Theatre Nurses
- International Cancer Management Course
- Liver Transplantation: A Multidisciplinary Team Approach
- Plastic & Reconstructive Surgery Course for Theatre Nurses
- Pre-Hospital Burn Life Support Course
- Pre-Hospital Trauma Life Support Instructors Course
- Pre-Hospital Trauma Life Support Providers Course
- Renal Transplantation Workshop
- Training the Trainers Course
- Vascular Surgery Course for Theatre Nurses
- Workshop on Basic Laparoscopy for Theatre Nurses
- Workshop on Lasers for Theatre Nurses
- Workshop on Sterilisation Methodology & Monitoring
- Workshop on Surgical Stapler for Theatre Nurses
- Wound Care Course

ADDITIONAL SERVICES

Since 2000, a Surgical Skills Training Program for Surgical Residents has been designed for residents (juniors and seniors) of the Department. Doctors attending elective training at the Department are invited to participate in this Program as well. In 2002, a systematic assessment and training system was established with the assistance of the Imperial College School of Medicine, United Kingdom. If the facility and the resources allow, the Centre will offer this training to surgical residents from other hospitals.



Conferences, Forums, and Lectures

The international profile of the Department has grown significantly over the past decade. This has been accomplished with successful surgical results, research excellence and the high quality of the Department's publications.

The visibility of this success is enhanced by visits and presentations at regional and international meetings.

The image that we present to our invited surgical guests from around

the world has also enhanced our standing. Since the previous edition of the Department's prospectus, we have been privileged to host a long list of distinguished surgeons. Their contributions, complimented by high standard presentations by our own staff, have been of much benefit to the Department.

HONG KONG SURGICAL FORUM

These biannual Winter and Summer meetings have continued uninterrupted since their inception in 1983. The ten forums held since our 1997 prospectus have maintained the high standard established at the outset. Eminent speakers are invited to give the prestigious Digby Memorial Lecture (Table 1) and GB Ong Lecture (Table 2), both of which have been incorporated into the Forums.

Also maintained has been the unique, distinctive atmosphere of these weekend meetings, which creates a strong and friendly collegiality among the distinguished invited speakers and our staff. Another valuable activity of the Forum, first implemented in 1996 under

Professor Wei's direction, has been the organised visits to China, where a post-Forum symposium is also arranged for selected speakers. Without a doubt, the value of the Forum, like so many other "get-togethers", extends far beyond the already excellent theme-related sessions of the meeting itself.

DISTINGUISHED LECTURE SERIES



Prof. and Mrs. WI Wei. Prof. Wei delivered the first Distinguished Lecture

The Distinguished Lecture Series is a biannual event initiated and sponsored by the Department of Surgery. Outstanding local speakers within and outside the medical profession are invited to deliver a Distinguished Lecture in their area of excellence. The first speaker in this series was Professor William I. Wei, President of the Hong Kong College of Otorhinolaryngologists, and William Mong Chair Professor of Otorhinolaryngology, Department of Surgery, University of Hong Kong Medical Centre. He delivered his lecture "Nasopharyngeal Cancer: From Myth to Reality" to a standing-room only auditorium.

REGIONAL AND INTERNATIONAL CONFERENCES

In 1967, Emeritus Professor GB Ong, Head of Department from 1963 to 1982, founded the Asian Surgical Association (ASA) where surgeons from all over Southeast Asia and further afield could meet to share their professional experiences. The ASA also publishes the *Asian Journal of Surgery*, which was listed on Index Medicus in October 2001. The Department continues to play an important role in the organisation of international meetings. Today, the office of the Conference Secretariat is located on the second floor of the Professorial Block, Department of Surgery, Queen Mary Hospital, and is responsible for the Secretariat Office of the ASA, as well as the organisation of all regional and international meetings hosted by the Department (Table 3).



Distinguished participants of the July 2000 Hong Kong Surgical Forum. (From left to right) Prof. MG Sarr, Prof. GT Wolf, Prof. DB Hoyt, Prof. MT Langaker, Prof. J Wong, Prof. GB Ong, Prof. JM Little, Prof. RJS Thomas, Prof. ME Bailey and Prof. SWK Cheng



Prof. Thomas R Russell (right), 2002 Digby Memorial Lecturer, being presented with the Digby Medal by Prof. WIR Davies, Vice-Chancellor of The University of Hong Kong



Prof. BL Bass, 2001 GB Ong Lecturer, with Prof. GB Ong

Digby Memorial Lectures

<i>Digby Memorial Lecture</i>	<i>Date</i>	<i>Lecturer and Topic</i>
1st	18 November 1969	Professor Sir John Bruce "Retrospect and Prospect: Reflections on Surgical Practice and Education"
2nd	19 November 1970	Dr. TB Teoh "The Pathologist and Surgical Pathology of Head and Neck Tumours"
3rd	24 March 1972	Professor WC MacKenzie "Surgery in the Undergraduate Medical Curriculum: To be or not to be?"
4th	21 December 1972	Professor DWC Chun "Choriocarcinoma in Hong Kong"
5th	14 November 1973	Dr. HB Torrance "Modern Trends in the Surgery of the Biliary Tract and Pancreas"
6th	7 November 1974	Professor HC Ho "The Epidemiology of Nasopharyngeal Carcinoma"
7th	23 January 1976	Professor HW Scott "The Surgical Management of Patients with Morbid Obesity"
8th	12 November 1976	Professor B Lofts "Testicular Function: A Comparative Viewpoint"
9th	3 May 1978	Dr. KC McKeown "Surgical Treatment of Cancer of the Oesophagus"
10th	10 November 1978	Dr. G Choa "Surgical Management of Chronic Suppurative Otitis Media"
11th	12 November 1979	Professor Sir Edward SR Hughes "Which Surgeon?"
12th	4 November 1980	Professor H Ngan "Radiology of the Liver – From a Local Viewpoint"
13th	28 February 1982	Professor FJ Gillingham "The Surgical Management of Ruptured Intracranial Aneurysms – A Thirty-year Study"
14th	1 November 1982	Professor JB Gibson "Primary Cancers of the Liver"
15th	6 May 1987	Dr. KL Thong "Medical and Health System with Special Reference to Hong Kong"
16th	16 January 1999	Professor CH Leong "The Hong Kong Surgeons in the New Millennium"
17th	15 January 2000	Professor Sir Harry SY Fang "The Knife is Not Enough"
18th	13 January 2001	Professor M Makuuchi "Problem of Liver Transplantation in Asia and Their Solutions"
19th	12 January 2002	Professor TR Russell "The Globalisation of Surgical Care: the American College of Surgeons' Role"

Table 1

GB Ong Lectures

<i>GB Ong Lecture</i>	<i>Date</i>	<i>Lecturer and Topic</i>
1st	16 January 1994	<i>Professor Ronald W Busuttil</i> "Orthotopic Liver Transplantation in 1994"
2nd	26 February 1994	<i>Professor Frank C Spencer</i> "Commitment and Comparison in the Care of the Surgical Patient"
3rd	28 January 1996	<i>Professor LaSalle D Leffall</i> "Medical Ethics in Today's Society"
4th	25 June 1996	<i>Professor Sir Robert Shields</i> "Some Perspectives on Ethics and Surgery"
5th	18 January 1998	<i>Professor Anna M Ledgerwood</i> "Lessons Learned in the Management of Injured Patients"
6th	5 July 1998	<i>Professor Seymour I Schwartz</i> "Maps and Medicine"
7th	4 July 1999	<i>Professor Jack D Hardcastle</i> "Screening for Colorectal Cancer"
8th	2 July 2000	<i>Professor J Miles Little</i> "Modern Medical Ethics: Ethonomics?"
9th	8 July 2001	<i>Professor Barbara L Bass</i> "How Good Is Your Surgeon? Measuring Surgical Outcomes and Surgical Competency"

Table 2

International Conferences Organised by the Department (1997 - January 2002)

<i>Conferences</i>	
1997	<p><i>Symposium on Trauma Surgery</i> 20 – 21 January, 301 People's Liberation Army Hospital, Beijing, China</p> <p><i>Hong Kong Surgical Forum – Winter</i> 25 – 26 January, Queen Mary Hospital, Hong Kong</p> <p><i>11th Biennial Congress of Asian Surgical Association</i> 2 – 5 March, Hong Kong Convention & Exhibition Centre, Hong Kong</p> <p><i>Hong Kong Surgical Forum – Summer</i> 26 – 27 July, Hong Kong Convention & Exhibition Centre, Hong Kong</p> <p><i>3th Joint Shanghai / Hong Kong Surgical Convention</i> 28 – 29 July, Shanghai Second Medical University, Rui Jin Hospital, Shanghai, China</p> <p><i>14th Asia Pacific Cancer Conference & 4th Hong Kong International Cancer Congress</i> 16 – 19 November, Hong Kong Convention & Exhibition Centre, Hong Kong</p>
1998	<p><i>Hong Kong Surgical Forum – Winter</i> 17 – 18 January, Queen Mary Hospital, Hong Kong</p> <p><i>4th Joint Shanghai / Hong Kong Surgical Convention</i> 19 – 20 January, Shanghai Second Medical University, Rui Jin Hospital, Shanghai, China</p> <p><i>Hong Kong Surgical Forum – Summer</i> 4 – 5 July, Hong Kong Convention & Exhibition Centre, Hong Kong</p> <p><i>1st Joint Guangzhou / Hong Kong Surgical Convention</i> 6 – 7 July, Sun Yat-sen University of Medical Sciences, Guangzhou, China</p>

	<i>5th Hong Kong International Cancer Congress</i> 8 – 11 November, Hong Kong Convention & Exhibition Centre, Hong Kong
	<i>6th International Congress of Oriental Aesthetic Plastic Surgery</i> 6 – 9 December, Hong Kong Convention & Exhibition Centre, Hong Kong
1999	<i>Hong Kong Surgical Forum – Winter</i> 16 – 17 January, Queen Mary Hospital, Hong Kong
	<i>5th Joint Shanghai / Hong Kong Surgical Convention</i> 18 – 19 January, Shanghai Second Medical University, Rui Jin Hospital, Shanghai, China
	<i>Hong Kong Surgical Forum – Summer</i> 3 – 4 July, Hong Kong Convention & Exhibition Centre, Hong Kong
	<i>1st Joint Beijing / Hong Kong Surgical Convention</i> 5 July, Beijing Medical University, The First Teaching Hospital, Beijing, China
	<i>6th Hong Kong International Cancer Congress & 4th Research Postgraduate Symposium</i> 14 – 17 November, Hong Kong Convention & Exhibition Centre, Hong Kong
2000	<i>Hong Kong Surgical Forum – Winter</i> 15 – 16 January, Queen Mary Hospital, Hong Kong
	<i>6th Joint Shanghai / Hong Kong Surgical Convention</i> 17 January, Shanghai Second Medical University, Rui Jin Hospital, Shanghai, China
	<i>Hong Kong Surgical Forum – Summer</i> 1 – 2 July, Hong Kong Convention & Exhibition Centre, Hong Kong
	<i>1st Joint Xian / Hong Kong Surgical Convention</i> 3 – 4 July, Fourth Military Medical University, Xian, China
	<i>7th Hong Kong International Cancer Congress & 5th Research Postgraduate Symposium</i> 7 – 9 December, Hong Kong Academy of Medicine Building, Hong Kong
2001	<i>Hong Kong Surgical Forum – Winter</i> 13 – 14 January, Queen Mary Hospital, Hong Kong
	<i>7th Joint Shanghai / Hong Kong Surgical Convention</i> 15 January, Shanghai Second Medical University, Rui Jin Hospital, Shanghai, China
	<i>6th Asian Research Symposium in Rhinology</i> 10 – 11 March, Hong Kong Convention & Exhibition Centre, Hong Kong
	<i>Hong Kong Surgical Forum – Summer</i> 6 – 8 July, Queen Mary Hospital, Hong Kong
	<i>2nd Joint Beijing / Hong Kong Surgical Convention</i> 9 July, Peking University, The First Teaching Hospital, Beijing, China
	<i>8th Hong Kong International Cancer Congress & 6th Research Postgraduate Symposium</i> 26 – 28 September, Hong Kong Academy of Medicine Building, Hong Kong
2002	<i>Hong Kong Surgical Forum – Winter</i> 11 – 13 January 2002, Queen Mary Hospital, Hong Kong
	<i>8th Joint Shanghai / Hong Kong Surgical Convention</i> 14 January, Shanghai Second Medical University, Rui Jin Hospital, Shanghai, China

Table 3



The Lighter Side

STAFF WELFARE COMMITTEE

The Department of Surgery is an active participant of the Staff Welfare Committee of Queen Mary Hospital. The Staff Welfare Committee works closely with its counterpart in the Hospital Authority, Head Office, and was

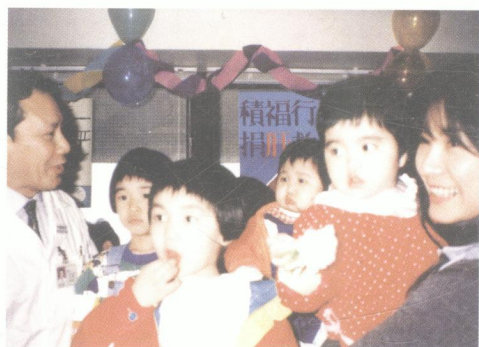


Members of the Department on a boat-trip. Pictured centre is Dr. KL Chan, Chairman of the Staff Welfare Committee (DOS)

established with clear objectives to benefit hospital staff: (a) to deal with occupational safety and health concerns and (b) to foster and maintain inter-departmental camaraderie.

SOCIAL EVENTS

We do not keep our heads down and work all the time. Sometimes a celebration is called



A Christmas party with some of the children who had underwent a liver transplantation

for, especially around the festive season from Christmas through to the Lunar New Year. The biggest departmental event is the annual Christmas dinner, when all members of staff gather together for a party. Honorary clinical teachers are also invited to the function to share and enjoy, with us, more light-hearted moments.

Another occasion for spirited get-togethers is success on examinations.

The Staff Welfare Committee of the Department of Surgery is currently comprised of Dr. KL Chan (Chairman), Dr. HH Tuen (Deputy Chairman), Dr. SM Chu, and Dr. B Chik. One of the events organised by the Committee is "Happy Hours" where staff of various clinical departments are encouraged to participate in social exchanges set within a friendly and relaxed environment. Complimentary drinks and snacks are provided to help foster a cozy ambience.

In addition, for the benefit of all surgical staff, information on upcoming events and other news bulletins are posted on the internet under the Department's website (<http://www.hku.hk/surgery>). Under the Welfare section of this website, latest updates on recreational and cultural activities such as art-of-tea workshops, hiking trips, family day-outs, and lessons on various sports and interests including tennis, swimming and Tai Chi can be found. The website also has a section where staff can post advertisements and other notices free-of-charge. Of course, comments or suggestions for improvement are always welcomed by the Staff Welfare Committee.



Two 'delighted' winners at the 2001 Christmas Lucky Draw



Dr. NG Patil with the winner of the Grand Prize in the 2001 Christmas Lucky Draw



New Fellows and other achievers alike gathered together at celebratory dinners, attended by staff of the Department, to congratulate them on a job well done. Throughout the year there are also social interactions with other departments at Queen Mary Hospital, and with the nursing and operating theatre staff. There are weddings and births to celebrate, new people to welcome and others to say goodbye to – all typical ‘family’ affairs in the life of the Department of Surgery. Time spent outside of work together is probably less than it once was because we are busier than ever, but those times are just as intense and fun as they have always been.



A farewell party for interns leaving the Department in 2000



Social gathering with nursing staff in 2000



Mingling with anaesthetologists in 2000

NEWSLETTER

The Staff Newsletter is a quarterly production of the Publicity Committee first published by the Department in April 1996 with Dr. Ronnie Poon as the Editor. Early issues took the form of a news bulletin, but soon became more elaborate with coloured illustrations covering important academic and social events at Queen Mary Hospital, Tung Wah Hospital and Grantham Hospital. Regular columns such as ‘Personal Profile’ have provided extra dimensions to the life and work of key personalities within the department – from professors to support staff. ‘Feature Articles’ in the Newsletter are solicited writings on a variety of subjects – from the history of surgery in Hong Kong to overseas training experience. In 1998, Dr. Gilberto Leung assumed the Editorship. While the original objective of the Staff Newsletter was the dissemination of information among existing and former staff,

the readership soon extended beyond the Department to include surgeons working in other institutions in Hong Kong. To reflect the evolution that had occurred, the publication was renamed The Newsletter, and expanded from the initial four-pages to the present six-page format, which includes a new section ‘New Development’. Future publications will continue to provide an entertaining and informative account of all that take place in a leading surgical centre both locally and regionally.



The Newsletter, November 2001



Honours and Awards

(From 1997 onward)



Master Surgeons of the Department in 2002



Professor John WONG

President

*American College of Surgeons, Hong Kong Chapter
Asian Pacific Federation of Organizations for Cancer Research and Control (1996-1998)
Asian Surgical Association (1996-1998)
International Society for Digestive Surgery (1996-1998)
Pan-Pacific Surgical Association*

Vice-President

The Society for Surgery of the Alimentary Tract (1999-2000)

Chairman

International Council of Surgical Gastroenterology (1998-1999)

Honorary Adviser

International Council of Surgical Gastroenterology (1998-1999)

Honorary Fellow

*German Society of Surgery
Royal National Academy of Medicine of Valencia, Spain*

Visiting Professor

*Johann Wolfgang Goethe University, Germany
Sun Yat-sen University of Medical Sciences, China
The Third Hospital, Beijing Medicine University, China
The University of Munich, Germany
University of British Columbia, Canada
University of California, USA*

Member

Board of Governors, Prince Philip Dental Hospital, Hong Kong

Editorial Board Member

17 surgical and surgery-related journals including Australian & New Zealand Journal of Surgery, Journal of the American College of Surgeons, and Surgery

Eponymous Lectures

*The John H. Trescher Lecture in Surgery, The Pennsylvania State University, USA (1998)
The 50th Annual Alfred A. Strauss Lecture, University of Washington, USA (1999)*

Professor Htut SAING

President	<i>Pacific Association of Paediatric Surgeons (1997-1998)</i>
Chairman	<i>Board of Directors, Pacific Association of Paediatric Surgeons (1997-1998)</i> <i>Nominations Committee, Pacific Association of Paediatric Surgeons (1997-1998)</i> <i>Publications Committee, Asian Association of Paediatric Surgeons</i>
Honorary Professor of Paediatric Surgery	<i>The Ministry of Health, Government of the Union of Myanmar</i>
Secretary General	<i>Asian Surgical Association (1996-2000)</i>
Founding Council Member	<i>Association of University Surgeons of Asia</i>
Honorary Adviser	<i>3rd World Congress on Pediatric Esophagus, New Delhi, India</i>
Editorial Board Member	<i>Asian Journal of Surgery</i> <i>Journal of Paediatric Surgery</i>

Professor William Ignace WEI

Named Chair Professor	<i>William Mong Professor in Otorhinolaryngology</i>
President	<i>Hong Kong College of Otorhinolaryngologists</i> <i>Hong Kong Head and Neck Society (2000-2002)</i> <i>Hong Kong Institute of Allergy (2001-2003)</i>
Founding Member	<i>Association of University Surgeons of Asia</i>
Council Member	<i>College of Surgeons of Hong Kong</i>
Visiting Professor	<i>Memorial Sloan Kettering Cancer Centre, USA</i> <i>Peking University, China</i> <i>Shanghai 2nd Medical University, China</i> <i>Sun Yat-sen University of Medical Sciences, China</i> <i>Tongji University, China</i> <i>University of British Columbia, Canada</i> <i>University of Cincinnati Medical Center, USA</i> <i>University Hospital Mannheim, Germany</i> <i>West China University, China</i>
Outstanding Researcher Award	<i>The University of Hong Kong (2000)</i>
Editorial Board Member	<i>14 surgical and surgery-related journals including Head & Neck and The American Journal of Otolaryngology</i>
Eponymous Lectures	<i>Hayes Martin Lecture, American Head and Neck Society (2001)</i>

Professor Sheung Tat FAN

Named Chair Professor	<i>Sun Chieh Yeh Chair of Hepatobiliary Surgery (2000-2005)</i>
Distinguished Research Achievement Award	<i>The University of Hong Kong (2001)</i>
Sir Patrick Manson Gold Medal	<i>The University of Hong Kong (1997-1998)</i>
Fellowship	<i>Croucher Foundation Senior Medical Research Fellowship (1998)</i>
Higher Degree	<i>Doctor of Medicine, The University of Hong Kong (1998)</i> <i>Thesis: Hepatectomy for hepatocellular carcinoma - towards a zero hospital mortality</i>



Prof. ST Fan receiving his Distinguished Research Achievement Award from Dr. Alice Lam, Chairman, University Grant Council

Visiting Professor

*Anhui Medical University, China
Chinese People's Liberation Army General Hospital
First Affiliated Hospital of Soochow University
Military Postgraduate Medical School, China
Nanking Medical University, China
Xinjiang Medical University, China
Zhejiang University, China*

Editorial Board Member

15 surgical and surgery-related journals including Liver Transplantation, Archives of Surgery, and Nutrition

Professor Paul Kwong Hang TAM

Foundation Director

Centre of Human Development and Birth Defects, The University of Hong Kong

Foundation Vice-President

Hong Kong Society of Paediatric Gastroenterology, Hepatology and Nutrition

Associate Dean (Research)

Faculty of Medicine, The University of Hong Kong (2001 - 2004)

Council Member

College of Surgeons of Hong Kong

Fellow *ad eundem*

Royal College of Surgeons of England

Honorary and Visiting Professor

*Capital University of Medical Sciences, China
Shanghai Second Medical University, China*

Editorial Board Member

3 surgical and surgery-related journals including Paediatric Surgery International



The University of Hong Kong has recognised the research endeavours of the Department of Surgery

Professor Stephen Wing Keung CHENG

National Delegate and Administrative Board

International Union of Angiology

Fellow *ad eundem*

Royal College of Surgeons of England

Visiting Professor

University of British Columbia, Canada

Executive Board Member

Chinese Society of Vascular Surgery

Consultant

Quangzhou Society of Vascular Surgery

Advisory Board Member

Asian Vascular Society

Editorial Board Member

Chinese Journal of Vascular Surgery

Professor Chung Mau LO

Vice-President	<i>International Society for Digestive Surgery</i>
Assistant Dean (Clinical Affairs)	<i>Faculty of Medicine, The University of Hong Kong</i>
Fellowship	<i>James IV Association of Surgeons Travelling Fellowship 2002</i>
Honorary Secretary	<i>Hong Kong Society of Transplantation</i>
Higher Degree	<i>Master of Surgery, The University of Hong Kong (1998)</i> <i>Thesis: Application of living donor liver transplantation to adult recipients in Hong Kong</i>

Dr. Kwong Leung Chan

Health Advisor	<i>Brighter Young Generation Scheme, Hong Kong Medical Association (2001-2002)</i>
Editorial Board Member	<i>Current Medicinal Chemistry</i> <i>Anti-inflammatory & Anti-allergy Agents</i>
Higher Degree	<i>Master of Surgery, The University of Hong Kong (1999)</i> <i>Thesis: Management of intestinal failure - parenteral nutrition, experimental small bowel transplantation and preservation injury of small bowel allograft</i>

Dr. Wei Cheng

Higher Degree	<i>Master of Surgery, The University of Hong Kong (2000)</i> <i>Thesis: Development of duodenum and duodenal atresia</i>
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Dr. Louis Wing Cheong CHOW

Vice-President	<i>Hong Kong Day Surgery Association</i>
Co-Director	<i>Suen Chi Sun Laboratory for Traditional Chinese Medicine, The University of Hong Kong</i>
Deputy Director (Medical Education Unit)	<i>Faculty of Medicine, The University of Hong Kong</i>
Editorial Board Member	<i>Chinese Medical Journal</i>
Higher Degree	<i>Master of Surgery, The University of Hong Kong (1999)</i> <i>Thesis: Modulation of acute inflammatory response caused by surgical trauma in a mastectomy model</i>

Dr. Kent Man CHU

International Guest Scholar	<i>American College of Surgeons (1999)</i>
JSGS 2001 Akita Award	<i>The Japanese Society of Gastroenterological Surgery</i>
Editorial Board Member	<i>Annals of Cancer Research and Therapy</i>
Higher Degree	<i>Master of Surgery, The University of Hong Kong (2001)</i> <i>Thesis: Helicobacter pylori infection and gastroduodenal ulcer disease</i>

Dr. Kin Wah CHU

Vice-President	<i>Hong Kong Medical Association (2000-2002)</i>
Vice-Chairman	<i>Foundation Fund, Hong Kong Academy of Medicine (2001-2002)</i>
Vice-Principal	<i>Stoma School, Sun Yat-sen University of Medical Sciences (2000-2002)</i>
Honorary Consultant	<i>Department of Health, Hong Kong SAR, China</i>
Honorary Secretary	<i>Hong Kong Academy of Medicine (1996-2002)</i>

Dr. Chiu Ming HO

Higher Degree	<i>Master of Surgery, The University of Hong Kong (1997)</i> <i>Thesis: Basis of surgical treatment of hypopharyngeal cancer</i>
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Dr. Yau HUI

Editorial Board Member	<i>中國耳鼻咽喉顛底外科雜誌</i>
International Guest Scholar	<i>American Academy of Otolaryngology / Head and Neck Surgery Inc. (2000)</i>

Dr. Chi Ming LAM

Higher Degree	<i>Master of Surgery, The University of Hong Kong (1998)</i> <i>Thesis: Characterisation of the biophysical and pathological effects of hepatic cryosurgery</i>
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Dr. Simon LAW

Visiting Professor	<i>St. Luke's College of Medicine, The Philippines</i>
JSGS 2001 Akita Award	<i>The Japanese Society of Gastroenterological Surgery</i>
Editorial Board Member	<i>Diseases of the Esophagus</i>

Dr. Wai Lun LAW

Higher Degree	<i>Master of Surgery, The University of Hong Kong (2001)</i> <i>Thesis: Strategies in the management of mid and distal rectal cancers with a use of total mesorectal excision</i>
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Dr. Simon YL LEUNG

Higher Degree	<i>Master of Surgery, The University of Hong Kong (2000)</i> <i>Thesis: Treatment of advanced prostate cancer beyond hormonal therapy</i>
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Dr. Chi Leung LIU

Higher Degree	<i>Master of Surgery, The University of Hong Kong (1999)</i> <i>Thesis: Management of rupture of hepatocellular carcinoma</i>
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Dr. Chung Yau LO

Council Member	<i>Asian Association of Endocrine Surgeons</i>
International Advisory Board Member	<i>Asian Association of Endocrine Surgeons</i>
Deputy Director (Medical Education Unit)	<i>Faculty of Medicine, The University of Hong Kong</i>
Higher Degree	<i>Master of Surgery, The University of Hong Kong (2000)</i> <i>Thesis: Optimizing parathyroid autotransplantation during thyroidectomy</i>

Dr. John M LUK

Visiting Associate Professor *Brigham and Women's Hospital, Harvard University, USA*

Dr. Nivritti Gajanan PATIL

Assistant Dean (Education) *Faculty of Medicine, The University of Hong Kong*

**Deputy Director
(Medical Education Unit)** *Faculty of Medicine, The University of Hong Kong*

**Award for Innovative
Excellence in Teaching,
Learning and Technology** *The University of Hong Kong
(at the 13th International Conference on College Teaching and Learning, Jacksonville,
Florida, USA)*

Editorial Board Member *Medical Education*

Dr. Ronnie TP POON

Fellowship *GB Ong Travelling Fellowship 2002*

Assistant Dean (Research) *Faculty of Medicine, The University of Hong Kong*

Editorial Board Member *Hong Kong Medical Journal*

Higher Degree *Master of Surgery, The University of Hong Kong (1999)
Thesis: Surgical strategies to improve long-term survival after hepatectomy for hepatocellular
carcinoma*

Dr. Herman MK TANG

Higher Degree *Master of Surgery, The University of Hong Kong (2001)
Thesis: The conchal cartilage - effect of its management on the size of the meatoplasty and the
outcome of the open mastoid cavity*

Dr. Sau Yan WONG

President-Elect *Hong Kong Burns Society (since 2001)*

Honorary Secretary *Plastic Surgery Board, Hong Kong Academy of Medicine*

Council Member *Hong Kong Burns Society (1995-1999)
Hong Kong Head and Neck Society (1999-2001)
Hong Kong Society of Plastic and Reconstructive Surgeons (1999-2001)*

Dr. Po Wing YUEN

President *Asian Research Symposium of Rhinology*

Censor-in-Chief *The Hong Kong College of Otorhinolaryngologists (2002-2004)*

Eminent Scientist Award *International Research Promotion Council (2000)*

Editorial Board Member *Hong Kong Medical Journal
Korean Journal of Rhinology*

Higher Degree *Master of Surgery, The University of Hong Kong (1997)
Thesis: Carcinoma of tongue - clinicopathological study*



Appendix I

NUMBER OF OPERATIONS PERFORMED (AUGUST 2000 - JULY 2001)

Data source: OT Service, Queen Mary Hospital

Classification of Operation	Ultra-Major	Major	Intermediate	Minor	Total
Breast	1	106	89	5	201
Colorectal	18	292	77	3	390
Ear, Nose and Throat *	14	114	268	124	520
Endocrine	1	123	7	1	132
Esophageal	59	8	4	1	72
Head and Neck	70	192	375	309	946
Hepatobiliary / Pancreatic	193	115	11	2	321
Liver Transplantation	45	–	–	–	45
Paediatric	14	193	187	441	835
Upper Gastrointestinal	8	106	56	10	180
Urology	5	437	489	11	942
Vascular	36	129	79	49	293
TOTAL	464	1,815	1,642	956	4,877

** Statistics from Department of ENT*

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