10.7 Colonoscopic surveillance and screening for familial colorectal cancer: experience of a regional registry

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A family history of colorectal cancer is one of the most important risk factors for colorectal neoplasia. Regular colorectal screening is recommended for individuals having a lifetime risk of colorectal cancer above one in ten due to a positive family history. Index patients from these families should also have regular surveillance for metachronous colorectal neoplasia. We report the result of such a screening programme run by the Hereditary Gastrointestinal Cancer Registry. Factors affecting the detection of colorectal neoplasia on screening are explored. Families with familial adenomatous polyposis are excluded. Up to April 1998, 67 families, including 16 families with hereditary non-polyposis colorectal cancer syndrome (HNPCC) entered our programme. Thirty eight index patients (20 male, 18 female) and 144 first-degree relatives (FDR) (70 male and 74 female) at mean ages of 43.7 (range: 20-78) and 39.4 (range: 17-74) years respectively were screened. Colonoscopy is the screening procedure of choice. For index surveillance, metachronous colorectal neoplasia were detected in 9 patients at 11 procedures, including three adenocarcinoma (detection rate: 23.7%). Longer interval between surveillance and initial colorectal cancer diagnosis was found to be the only significant factor for the development of metachronous colorectal neoplasia ($p = 0.04$). Of the 174 screening procedures performed, 17 asymptomatic FDR were found to have colorectal neoplasia in 19 occasions, including one adenocarcinoma (detection rate: 11.8%). Fifteen of these lesions (78.9%) were proximal to the splenic flexure and hence beyond the reach of flexible sigmoidoscope. Older age at screening ($p = 0.018$) and having two or more FDR suffering from colorectal cancer in the family ($RR = 3.528$) were significant factors for the detection of colorectal neoplasia on screening. Our result demonstrates the usefulness of colorectal screening based on a family history of colorectal cancer and the importance of colonoscopy as the screening tool.

10.8 Transrectal ultrasound-guided biopsy of prostate for carcinoma of prostate: local experience

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Purpose: As it is the second most frequent cause of cancer death in men in the Western world, prostate cancer has become a major health and social problem comparable to breast cancer. Prostate cancer was also increasingly recognized as a cause for morbidity and mortality among local Chinese populations. We reviewed our experience in using transrectal ultrasound (TRUS)-guided biopsy of prostate for diagnosing prostate cancer.

Methods: We performed TRUS-guided trucut biopsy of prostate in 98 patients from January 1997 to April 1998. Indications included a raised Prostate specific antigen (PSA) level (> 4 ug/L) and/or prostate nodule palpable on digital rectal examination among male patients with lower urinary tract symptoms. Complete blood count and clotting profile were checked pre-biopsy to rule out any bleeding tendency. 6-quadrant random biopsy of the prostate was performed in each patient with 18G autofiring trucut biopsy needle with TRUS guidance under antibiotic cover. Biopsies would be taken from suspicious areas separately. Patients were discharged on the same day.

Results: 98 patients, age range from 40 to 83 (mean 67.6) underwent the procedure. Adenocarcinoma of prostate was detected in 13 patients (13%), with a Gleason score from 2 to 8 (mean 6); low grade prostatic intraepithelial neoplasia was detected in 1 patient (1%). 3 out of 20 patients (15%) with prostate nodule on digital rectal examination turn out to have malignancy (3% in all patients), but the risk was not statistically significant. 13 out of 86 patients (15%) with raised PSA level have malignancy (13% in all patients). The risk for prostate cancer was higher for patients with a PSA level of more than 7 ug/L and it was statistically significant ($P = 0.003$). When the PSA level of 4 ug/L was used, the difference was not statistically significant. Complications included haematuria, urinary tract infection and acute retention of urine, all resolved with conservative treatment. Radical retropubic prostatectomy was performed in 3 patients subsequently whereas in 1 patient only pelvic lymph node dissection was performed during exploration because of locally advanced disease. Patients with symptomatic metastasis were treated with hormonal manipulation (viz. Bilateral orchidectomy, antiandrogen or LHRH agonist).

Conclusion: Transrectal ultrasound-guided trucut biopsy of prostate is a safe and effective method for diagnosing carcinoma of prostate. With the help of Digital rectal examination and PSA level it may help in the early detection of curable cases.

10.9 Genetic-guided screening programme for familial adenomatous polyposis: result of a regional registry

11 Evidence-based medicine