

## **IN-HOSPITAL AND LONG-TERM CLINICAL OUTCOME FOLLOWING PERCUTANEOUS TRANSLUMINAL CORONARY ANGIOPLASTY IN OCTOGENARIANS**

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With improvements in coronary angioplasty (PTCA) hardware, increasing operator experience, and aging of the population, a rising number of elderly patients can undergo PTCA nowadays as a treatment for their coronary artery disease. The in-hospital and long-term clinical outcome of PTCA in octogenarians is unknown. From Jan 1994 to Nov 1996, 25 patients aged  $\geq 80$  underwent 27 PTCA procedures in Queen Mary Hospital. There were 7 female and 18 male. Mean age was  $83 \pm 2$  years (range 80-87). Risk factors included diabetes in 24%, hypertension in 32%, smoking in 36%, and a total cholesterol level of  $\geq 6.0$  in 48%. The indications for PTCA were stable angina in 12 (48%), unstable angina in 10 (40%), and post-infarctional angina in 3 (12%). All patients were considered unsuitable for surgery. 30% (n=8) had renal impairment (creatinine  $\geq 130$   $\mu\text{mol/L}$ , range 144-284). Sixteen patients (64%) had  $\geq 2$  vessel disease. One operator (operator X) was responsible for half of the procedures (67% of all females) while the rest were performed by 4 other operators. PTCA was attempted in 28 vessels [16 LAD (57.2%), 6 RCA (21.4%), and 6 LCx (21.4%)]. The lesions were successfully crossed and dilated in 24/28 (86%) vessels. Median hospital stay post-PTCA was 3 days (mean  $5.4 \pm 6.6$ ). 26 of 27 procedures were uneventful and patients were discharged well. There was one major complication (operator Y) in an 86-year-old man with unstable angina refractory to medical treatment. PTCA was unsuccessful. The patient developed VT and died in hospital a week later. At a mean follow-up of  $14.1 \pm 9.4$  months, 19/24 treated patients (79%) were totally free from angina symptoms or cardiac events. There was no cardiac death but two non-cardiac deaths, one from stroke and one from carcinoma of the stomach. Five patients (21%) required medical treatment for recurrent angina. Conclusions: PTCA in octogenarians is a safe procedure. It is often the only treatment option left for those elderly patients with multiple medical disorders. The majority of these patients remain symptom- and event-free at 12 months follow-up.

## **NON-SURGICAL TECHNIQUES IN THE TREATMENT OF PERIPHERAL VASCULAR DISEASE OF THE LOWER LIMB: PRELIMINARY RESULTS IN A COHORT OF ELDERLY, HIGH RISK PATIENTS**

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From Dec 1994 to Nov 1996, percutaneous transluminal angioplasty and stenting (PTA) was performed in 23 lower limb vessels in 16 patients over 21 procedures. There were 9 male and 7 female. Mean age was  $70 \pm 5$  years (range 62-80). The site of PTA was the iliac artery in 17 and superficial femoral artery (SFA) in 6. Risk factors included diabetes in 8 patients (50%), hypercholesterolaemia in 12 (75%), hypertension in 13 (81%), and smoking in 13 patients (81%). Seven patients (44%) has renal impairment. The mean serum creatinine was  $130 \pm 68$  (range 67-310  $\mu\text{mol/L}$ ). The indication was claudication in 16 patients, pregangrene changes in 1 patient, and gangrene in 2 patients. Ten patients (63%) were referred from a vascular surgeon. The majority of the patients (n=14) were not suitable for surgery due to underlying coronary artery disease (n=8), cerebrovascular disease (n=5), severe renal impairment (n=5), or extensive peripheral vascular disease with poor distal run-off (n=9). Six vessels (26%) were totally occluded. All lesions attempted were successfully dilated. A total of 27 stents were deployed. All patients were discharged home. The median hospital stay was 3 days post PTA. During early follow-up, one 72-year-old patient with diabetes and hypertension developed subacute occlusion of his stented SFA. Following thrombolytic therapy, the patient developed a hemorrhagic stroke and succumbed. At a mean follow up of  $13 \pm 8$  months, 14/15 patients (93%) [19/20 vessels (95%)] were symptom-free and event-free. Although complete angiographic follow-up is pending, angiographic follow-up to date (12 vessels) showed restenosis in only 1 vessel (8%). Repeat angioplasty was performed uneventfully. Conclusions: In a high risk group of elderly patients not suitable for surgical revascularization, percutaneous angioplasty and stenting is a safe and effective procedure. The majority of these patients had resolution of their claudication and improvements in their quality of life. Three patients with gangrene and pregangrene changes were able to avoid amputation altogether. Despite diffuse disease and total occlusion in some of these patients, the restenosis rate was an acceptable low of 8% at a mean follow up of 13 months.