

Lower Limb Amputations in Trinidad: Analysis of 576 cases

J. Rahaman, S. Stewart, G. Changal Raju and V. Naraynsingh

Department of Surgery, General Hospital, Port-of-Spain, Trinidad

Major lower limb amputation remains one of the commonest operations done by the general surgeon and carries the highest mortality of all operations at the Port-of-Spain General Hospital. While vascular insufficiency is the main indication for amputation in Great Britain and the United States, we had a clinical impression that the diabetic septic foot was more important in our population. Of 658 consecutive major limb amputations done at the Port-of-Spain General Hospital from January 1979 to December 1984, 576 case notes were available for analysis. There were 299 males and 277 females with an equal mean age of 63 years. Ages ranged from 27 years; 81% of patients were over 60 years, 76% were diabetic, 34% hypertensive and 28% were both diabetic and hypertensive.

Seventy-seven per cent had above-knee (A-K) and 23% below-knee (B-K) amputations (BK: AK = 0.29) A-K amputees being older (65 years) than B-K amputees (59 years). Of 43 bilateral amputees, 38 were A-K (B-K: A-K = 0.13); 84% of bilateral A-K amputees had peripheral vascular disease (PVD).

Diabetes mellitus with limb sepsis (55%) was the commonest indication for amputation followed by PVD (36%). The overall mortality rate was 23%, with a higher mean age among fatalities (72.1 yrs). Overwhelming sepsis and "multiorgan failure" (54%), ischaemic heart disease (76%), cerebro-vascular accident (11%) and pulmonary embolism (9%) were the major causes of death. Mortality among diabetics (23%) was not different from among non-diabetics (23%), but PVD associated with diabetes (37%) had a significantly higher ($p < 0.001$) rate than PVD without diabetes (14%). Consistent with published data, the AKA mortality rate (26%) was higher than that for BKA (10%) ($p < 0.001$).

The average hospital stay was 51 days (range of 4 - 190). Diabetics (57 days) stayed longer than non-diabetics (35 days).

The high amputation rate, mortality rate and prolonged hospitalisation suggest that urgent measures be taken to improve the outcome for patients with ischaemic or septic feet. We recommend an extensive education programme in foot care for doctors, nurses and diabetic patients, early and aggressive medical and surgical treatment of the infected diabetic foot, that attempts be made to increase our B-K: A-K ratio and more frequent arteriography and vascular reconstruction.