

Pattern and causes of amputation in diabetic patients--a multicentric study from India.

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Author information

Abstract

OBJECTIVE:

One of the most significant complications of diabetes is foot disease, which often leads to amputations was found to be very common in developing countries like India, the diabetic capital of the world. Hence this study has been planned to assess the pattern and causes of amputations in diabetic patients across various parts of India.

SUBJECTS AND METHODS:

A total of 1985 (M:F 1249:736) type 2 diabetic subjects were selected from 31 centres across India. Out of 1985 subjects, a total of 1295 (850:445) patients who had undergone amputations both major and minor were included in this analysis. A proforma which contains details on level of amputations, diabetes history, deformity details, causes of amputations and other associated diabetic complications was used to collect the data. Peripheral vascular disease was assessed by using Doppler studies. Presence of neuropathy was assessed by using 10 g monofilament and 125 Hz tuning fork.

RESULTS:

The major cause for the occurrence of amputations among the patients was found to be infection. Almost 90% of the patients had infection. Patients had different types of amputations: major amputations accounting for 29.1% (n=377) and minor amputations in 70.9% (n=918) of subjects. Among the subjects who underwent major amputations, more than 50% accounts for below knee amputations and 11.9% above knee amputations. Out of total amputations, over half of the incident amputations were of toes and rays. Presence of claw toes was seen in 64% of patients. Prevalence of neuropathy (82%) was high and 35% had peripheral vascular disease.

CONCLUSION:

In conclusion, infection was found to be the major cause of amputation in India. Below knee, toes and rays amputations were the most common type of amputations. Diabetic patients should be educated on foot care and importance of proper foot wear.