Clinical characteristics and medical costs of diabetic patients with amputation at central urban hospitals in China

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Background and aims: To explore the clinical characteristics, medical cost and impacting factors in the diabetic patients with amputation.

Methods: The data of diabetic amputation from the whole year of 2010 at 39 central municipal Class 3A hospitals all across China were retrospectively analyzed according to the unified protocol, including demographic characteristics, diabetic complications, classification of diabetic foot disease, level and prognosis of the amputation, and medical cost in the hospitals.

Results: Among than, 28.2% of the all amputated patients or 39.5% of the non-traumatic patients were diabetic patients. There are 313 males and 162 females. The average age and duration of diabetes were 66.2 ± 11.9 yrs and 130.1 ± 93.7 months. The level of HbA1c was 8.9 ± 2.4%. Among all amputated diabetics, the concurrent conditions included neuropathy (50.1%), peripheral artery disease (74.8%), nephropathy (28.4%) and retinopathy (25.9%). The patients with foot ulcer at Wagner 4 (50.3%) were more common. Among them, 67.5% of the patients had minor amputation with a hospitalization stay of 33.0(24.0-45.0) days and a medical cost of 26,138(16,155-46,021) Yuan RMB. The duration of diabetes, diabetic complications, the severity and location of ulcers, amputation level influenced their hospitalization duration and medical cost.

Conclusions: The patients with diabetes and amputation are elder with more chronic diabetic complications and uncontrolled hyperglycemia. Most of them complicated with local gangrene and require minor amputation at admission. Their hospital stays are longer and medical costs higher significantly correlated with diabetic complications, severity and location of foot ulcers and level of amputations.