Incidence, risk factors for amputation among patients with diabetic foot ulcer in a North Indian tertiary care hospital.

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Abstract

OBJECTIVE:
Aim of this study was to evaluate the incidence and risk factors for amputation among patients with diabetic foot ulcer (DFU).

RESEARCH DESIGN AND METHODS:
We performed a prospective study of 162 DFU in patients treated in a multidisciplinary based diabetes and endocrinology centre of Jawaharlal Nehru Medical College of Aligarh Muslim University, Aligarh, India during the period of December 2008-March 2011. Detailed history and physical examination was carried out for every subject. Risk factors for amputation were determined by univariate analysis with 95% of CI.

RESULTS:
The overall amputation rate was 28.4%. On univariate analysis, male sex [OR 2.8, RR 1.28], hypertension [OR 2.83, RR 1.31], neuropathy [OR 3.01, RR 1.35], nephropathy [OR 2.24, RR 1.26], LDL-C (>100mg/dl) [OR 2.53, RR 1.28], total cholesterol (>150mg/dl) [OR 3.74, RR 1.52], HDLC(<40mg/dl) [OR 1.19, RR 1.18], triglycerides (>200mg/dl) [OR 5.44, RR 1.76], previous antibiotic use [OR 9.12, RR 1.92], osteomyelitis [OR 6.97, RR 2.43] and biofilm infection [OR 4.52, RR 1.41] were significant risk factors.

CONCLUSION:
The risk factors for amputation were presence of PVD, leukocytosis, neuropathy, nephropathy, hypertension, dyslipidemia, over use of antibiotics, osteomyelitis, biofilm production and higher grade of ulcer.

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