

Incidence, Risk Factors and Outcome of Acute Lower Limb Cellulitis in Patients Admitted to a Tertiary Care Hospital

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Lower limb cellulitis is a common condition among inpatients. Better understanding of incidence, risk factors and outcome will improve management. To describe the incidence, risk factors and outcome of patients with acute lower limb cellulitis and to identify the significance of *Staphylococcus aureus* nasal carriage. A case control study was done with 89 clinically diagnosed acute lower limb cellulitis patients and 77 age and sex matched control group in surgical and medical wards of Colombo South Teaching Hospital (CSTH) for 3 months. Demographic data and other related information were collected using an interviewer administered questionnaire. Nasal swabs were collected and cultured according to standard procedures. All Cellulitis patients were followed up for 30 days. Incidence rates of lower limb cellulitis was 4.65 per 1000 admissions. BMI >25, diabetes mellitus, lower limb edema, existing lower limb ulcer, penetrating trauma, toe web problems and past history of cellulitis were statistically significant ($p < 0.01$) risk factors. Nasal carriage of *Staphylococcus aureus* was not a significant risk factor. First line antibiotics were started in 86.7% of patients, however only 50% received correct doses. Most (74.4%) were discharged without complications, 18.9% were hospitalized for >10 days and 15.6% were readmitted with cellulitis during follow-up. Risk factors for lower limb cellulitis include several predisposing factors and presence of entry sites for pathogens. Considerable number of patients were readmitted due to recurrence. Correction of modifiable risk factors and administration of proper antibiotics in correct doses will improve management of these patients.

Key words: Lower limb cellulitis , Risks