

00174 An Overview of Lower Limb Cellulitis in an Acute Medical Ward in Singapore- A Few Lessons We Can Learn

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Aims: Cellulitis is a common cause for hospital admissions. In recent years, restructured hospitals in Singapore have introduced the model of an 'acute medical unit' (AMU), with aims to standardize care with improved processes, and hence, reduce length of stay, recurrence and healthcare consumption.

Aims: To study patients with lower limb cellulitis admitted to an AMU in Singapore; Baseline characteristics, treatment and health outcomes are described; To identify risk factors that lead to prolonged admission and recurrence.

Methodology: A retrospective, descriptive study of patients admitted to Acute Medical Ward (AMW) in Singapore General Hospital (SGH) from January to June 2016 was done. Descriptive statistics was done using univariate and multivariate analysis. p-values were calculated using Fisher's Exact Test and logistic regression.

Result: 266 unique patients were included. Mean age was 63.6 years. Comorbidities were common, including obesity, diabetes and CVI, at 66.9%, 39.5% and 19.2% respectively. Physicians frequently ordered ancillary investigations. Blood cultures were done in 92.5%, CRP in 88% and procalcitonin in 62.8%.

Duration of antibiotic treatment was longer than expected. The mean duration was 10.48 days, with 95.5% receiving antibiotics for >5 days. We found 12-month readmission rates to be increased in patients with DM (Adj OR 1.77 95% CI 0.97-3.23), CKD (Adj OR 1.93 95% CI 0.91-4.06) and previous stroke (Adj OR 2.39 95% CI 0.93-6.11). Elevated inflammatory markers generally did not show significant difference in outcome, except procalcitonin, which was associated with prolonged LOS (Adj OR 2.63, 95% CI 1.10-6.81).

Conclusion: Patients admitted with cellulitis frequently have comorbidities that require the physicians' attention besides treating the acute infection. There is a role for physicians to further streamline healthcare utilization by being selective in ancillary investigations, and shortening duration of antibiotics. The AMU is an effective model to standardize management of such acute infections, for more effective healthcare utilization.