

The Impact of Diabetes Mellitus on Skin and Soft Tissue Infections

Authors : Stephanie Cheng, Benjamin Poh, Vivyan Tay, Sachin Mathur

Abstract : Aim: Diabetes mellitus (DM) is a worldwide pandemic affecting 500 million people. It is known to be associated with increased susceptibility to soft tissue infections (STI). Despite being a major public health burden, the literature relating the effects of DM and the presentation, severity and healing of STIs in general surgical patients remain limited. Methods: We conducted a retrospective review of all patients admitted with STI in a tertiary teaching hospital over a 12-month period. Patient demographics and surgical outcomes were collected and analyzed. Results: During the study period, 1059 patients were admitted for STIs, of which 936 (88%) required surgical intervention. Diabetic patients were presented with a higher body-mass index (BMI) (28 vs 26), larger abscess size (24 vs 14 cm²) and a longer length of stay (LOS)(4.4 days vs 2.9 days). They also underwent a higher proportion of wide debridement as well as application of negative pressure wound therapy (NPWT) (42% vs 35%). More diabetic patients underwent subsequent re-operation within the same sitting (8 vs 4). There were no differences in re-admission rates within 30 days nor subsequent abscess formation in those followed for 6 months. Conclusion: The incidence of STIs among DM patients represents a significant disease burden; surgeons should consider intensive patient counseling and partnering with primary care providers in order to help reduce the incidence of future STI admissions based on lifestyle modification and glucose control.

Keywords : general surgery, emergency general surgery, acute care surgery, soft tissue infections, diabetes mellitus

Conference Title : ICSA 2024 : International Conference on Surgery and Anesthesia

Conference Location : Paris, France

Conference Dates : October 28-29, 2024