

BACTERIOLOGY OF DIABETIC FOOT INFECTION IN HOSPITAL TELUK INTAN

Kathiravan Murugan¹, Thaneshwara Rao Apanna¹, Muhammad Taufiq Mohd Jailani¹, Shukur Ahmad¹,
Yeoh Kian Hua¹, Mohd Sharifudin Said¹

¹Hospital Teluk Intan

Introduction: Foot infections are a major complication of diabetes and may subsequently develop gangrene and lower extremity amputation¹. This cross-sectional study was done to find out the common bacteriology of diabetic foot infection in Hospital Teluk Intan .

Methodology: This cross-sectional study was carried out by reviewing the records of patients who presented with diabetic foot infection requiring debridement and admission to Hospital Teluk Intan for a 31-month period from January 2017 till July 2019. The exclusion criteria are patients who underwent wound debridement as outpatient.

Results: 167 data was collected and noted the most common organism is *Proteus mirabilis* 26% (43 cases) followed by *Streptococcus Agalactiae* grp B 14% (23 cases), *Staphylococcus Auereus* and *Pseudomonas Aeruginosa* 12% (20 cases each), *Klebsiella Pneumonia* 11% (18 cases) and *Escherichia Coli* 10% (17 cases). 84% of *Proteus mirabilis* isolated cases were sensitive to Ampicillin+Sulbactam (36 cases).

Conclusion: The National Health and Morbidity Survey 2015 reported diabetes prevalence for adults above age of 18 are 17.5% in Malaysia². Foot infections are responsible for most of the diabetes associated hospital admissions. In Hospital Teluk Intan, patients with diabetic foot infections are empirically covered with Ampicillin+Sulbactam (Unasyn). Antibiotic is then changed based on C+S results taken during debridement. As per this study 84% of cases with *Proteus miraabilis* are sensitive to Ampicillin+Sulbactam. Increasing diabetes mellitus prevalence and its related complications especially diabetic foot infections are alarming. Early treatment and initiation of appropriate antibiotics targeting common organisms is crucial in preventing major amputations.