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Clinical Medicine

Poster

Efficacy of Antibiotic Laden Collagen Sponge In Treating Open Fracture

Kularaj Subramaniam¹, Aminuddin Che Ahmad¹

¹*Department of Orthopaedics, Traumatology and Rehabilitation, Kulliyah of Medicine, International Islamic University Malaysia*

Presenter: Kularaj Subramaniam

Introduction: Open fractures are known as a major predisposing factor for a higher incidence of infection. The aim of this study was to assess the efficacy of antibiotic impregnated collagen sponge in reducing the risk of infection in open fractures Grade 3. **Materials and Methods:** This was an observational cohort study, evaluating the incidence of infection in open fractures of the femur Grade 3A/3B following insertion of gentamicin impregnated collagen sponge (Collatamp®) during definitive fracture fixation. Erythrocyte Sedimentation Rate (ESR) and total white count (TWC) were used as blood parameters to observe for the possibility of infection from pre-operatively up to follow up visits at the clinic. **Results:** A total number of 36 patients, whom had sustained open fracture of the femur Grade 3A/B, underwent internal fixation with antibiotic impregnated collagen sponge insertion. Overall, ESR and TWC in both male and female gender were downgoing trend, with p values of <0.001, and clinically there was no evidence of infection. No infection was identified in 97.2% of patients, following the internal fixation and antibiotic impregnated collagen sponge insertion. There was only one patient (2.8%) who developed infection following the definitive internal fixation and antibiotics impregnated collagen sponge insertion. **Conclusion:** The use of antibiotic impregnated collagen sponge in open fractures reduced the occurrence of infection. Furthermore, this allows for an uncomplicated union of the bone following definitive fixation.