

RE-INTERNAL VS EXTERNAL? A CASE REPORT ON SEPTIC NON UNION OF HUMERUS WITH TWICE IMPLANT FAILURE TREATED WITH ILIZAROV EXTERNAL FIXATOR

Mohamad Saifudin Othman¹, Ong Kean Chao¹, Teo Soo Lin¹, Basir Towil¹

¹Hospital Sungai Buloh

Introduction: Fracture of humeral shaft is relatively simple to treat with large acceptability for conservative management. Surgical treatments either with plate and nail are well accepted in many conditions with added advantage of early preservation of function. Nevertheless, the outcome can be disastrous if infection sets in and may hinder the overall benefit of surgery. This article reports the journey of patient with multiple implant failure and had to endure the cumbersome Ilizarov External Fixator before union achieved with infection free limb.

Discussion: We performed a surgery on a 21 years old man, who presented to us with twice failure of internal implant treated at other hospital. He previously sustained open fracture of humeral shaft that was debrided and stabilised with conventional narrow dynamic compression plate. Unfortunately, he suffered from persistent infection and underwent implant removal and replating with long locked plate. Due to persistent infection, implant failed again over the proximal screw-plate interface and causing implant pull-out and non union. We performed implant removal, fracture ends' bone resection, previous screw hole curettage, acute docking of bone ends with Ilizarov External Fixator. Patient was able to cooperate fully and performed his activities of daily living with some difficulties due to large external frame. He was on frame for 5 months and union. achieved with no infection. Good functional outcome so far up to 1 year post surgery.

Conclusion: Ilizarov External Fixator is the safest option in achieving bony union and eradicating infection comparing to other methods in dealing this type of complication of fracture.