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LOCALLY DELIVERED TAILORED ANTIBIOTICS FOR SALVAGE OF CHRONIC DIABETIC FEET INFECTIONS

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Management of chronic diabetic feet infections is challenging and labour intensive 29 patients underwent salvage surgical debridement for diabetic foot infection. The mean age was 52.7; 23 males and 6 females. 9 patients type I and 20 type II diabetics. The mean follow up was 6.3 months. All were discussed in the Multidisciplinary Team Meeting. Magnetic resonance imaging preoperatively was done. All 29 patients had chronic osteomyelitis; 7 Hind foot and 22 Forefoot (11 phalangeal, 3 metatarsals and 8 affecting both phalanges and metatarsals). Surgical debridement was undertaken in 24, 2 toe amputations and 3 ray amputation. 5 deep tissue biopsies were sent for microbiology & a further deep sample was sent for histopathology. All patients had calcium sulphate paste (STIMULAN) mixed with tailored antibiotic injected into the deep tissues and or bone.12 patients had postoperative negative pressure wound therapy (NPWT) dressings.10 had regular postoperative non adhesive dressing and 7 underwent primary closure. 12 were treated with oral antibiotics and 9 had intravenous antibiotics. 8 patients did not receive any antibiotics. The seven patients who underwent primary closure have healed with no recurrence. The 2 patients who underwent NPWT and regular non adhesive dressings have demonstrated absence of infection. Due to the extensive debridement undertaken in these patients the limiting step in healing was epithelisation of the wound. All the patients have granulated. Local antibiotic delivery is effective in the treatment of chronic diabetic foot infection. We postulate that a tailored antibiotic regime based on cultures would have greater efficiency in treating infection.