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Programme and Abstracts



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[OP19] THE USE OF LOCALLY DELIVERED HIGHLY PURIFIED CALCIUM SULPHATE IMPREGNATED WITH ANTIBIOTICS IN THE MANAGEMENT OF THE DIABETIC FOOT WITH OSTEOMYELITIS

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Aim: Osteomyelitis is a challenging complication of diabetic foot ulcers, which may lead to amputation. Treatment with systemic antibiotics and/or surgery is required where there is non-healing or deterioration. Traditionally surgery involves the removal of infected bone to the level of good solid bone often resulting in severe loss of tissue and/or amputation. The use of calcium sulphate impregnated with antibiotics can minimise the amount of bone lost and speeds up healing.

The aim of this study was to look at outcomes of 109 diabetic patients who underwent such surgery. We present a 2-years follow up looking at healing times and duration of systemic antibiotics.

Method: Method: 109 patients were reviewed who had undergone day case surgery from March 2013 to February 2016. All the patients were under the care of our multidisciplinary diabetes foot clinic and deemed neuropathic and adequate blood supply. All patients had received off loading and systemic antibiotics. Osteomyelitis was confirmed by imaging and/or microbiology. Ulcer and bone sequestra were debrided and remaining bone was fenestrated and packed with highly purified calcium sulphate impregnated with Vancomycin 1g and Gentamicin 80mg. Intra operative bone samples were also sent to microbiology. Primary closure of the wound was carried out where possible.

	Median
Duration of ulcer pre-operatively	17 weeks
Duration of pre-operative systemic antibiotics	8 weeks
Healing time post operatively	6 weeks
Duration of antibiotics post operatively	1.4 weeks (10days)

Results / Discussion: The above results show the effectiveness of this modality of treatment in diabetic foot ulcers complicated by osteomyelitis. The authors acknowledge the limitation of this case series and would recommend a prospective multi-centre randomised control trial

Conclusion: The management of osteomyelitis is challenging, the use of highly purified calcium sulphate is an important adjunct to surgery. This is now considered much earlier in our treatment pathway.