

The Bone Infection Unit, Nuffield Orthopaedic Centre, Oxford, UK

Host for the 7th Oxford Bone Infection Conference (OBIC) 22nd- 23rd March 2018



The **Nuffield Orthopaedic Centre (NOC)** is a specialist orthopaedic hospital and part of the Oxford University Hospitals (OUH) NHS Foundation trust. The **Bone Infection Unit (BIU)** at the NOC is dedicated to the investigation and treatment of all aspects of bone and joint infection, including chronic long-bone osteomyelitis, diabetic foot infections, spinal infections and orthopaedic device-related infection. The centre of activity of the unit is a 24-bed dedicated inpatient ward. Each patient is under the combined care of a consultant infection physician (and trainees) and a specialist orthopaedic surgeon (and trainees). Plastic surgeons are often involved. There is a multi-disciplinary team (MDT) that includes a tissue viability nurse, Ilizarov nurse, dietician, occupational therapists, physiotherapists and home IV nurses. There is a large outpatient parenteral antibiotic therapy (OPAT) programme. The BIU runs consultant ward rounds, multidisciplinary team (MDT) meetings, radiology MDT meetings, a weekly combined orthopaedic / infection / plastics outpatient clinic and an OPAT clinic. There is close liaison with infection control.

Guidelines: The unit is involved with national and international guidelines on the diagnosis and management of bone and joint infections (including advice on microbiological methods <https://www.gov.uk/government/collections/standards-for-microbiology-investigations-smi>)

The unit is integrated closely with the OUH departments of adult and paediatric infectious diseases and microbiology. This offers additional opportunities to attend weekly educational seminars with invited speakers; combined case conferences; medical and surgical grand rounds; ward rounds on the inpatient infectious diseases ward; microbiology rounds (including intensive care, transplant, and general clinical consults); and HIV, Infectious diseases, Rheumatology and Hepatitis clinics.



Multiple intra-operative sampling using separate instruments



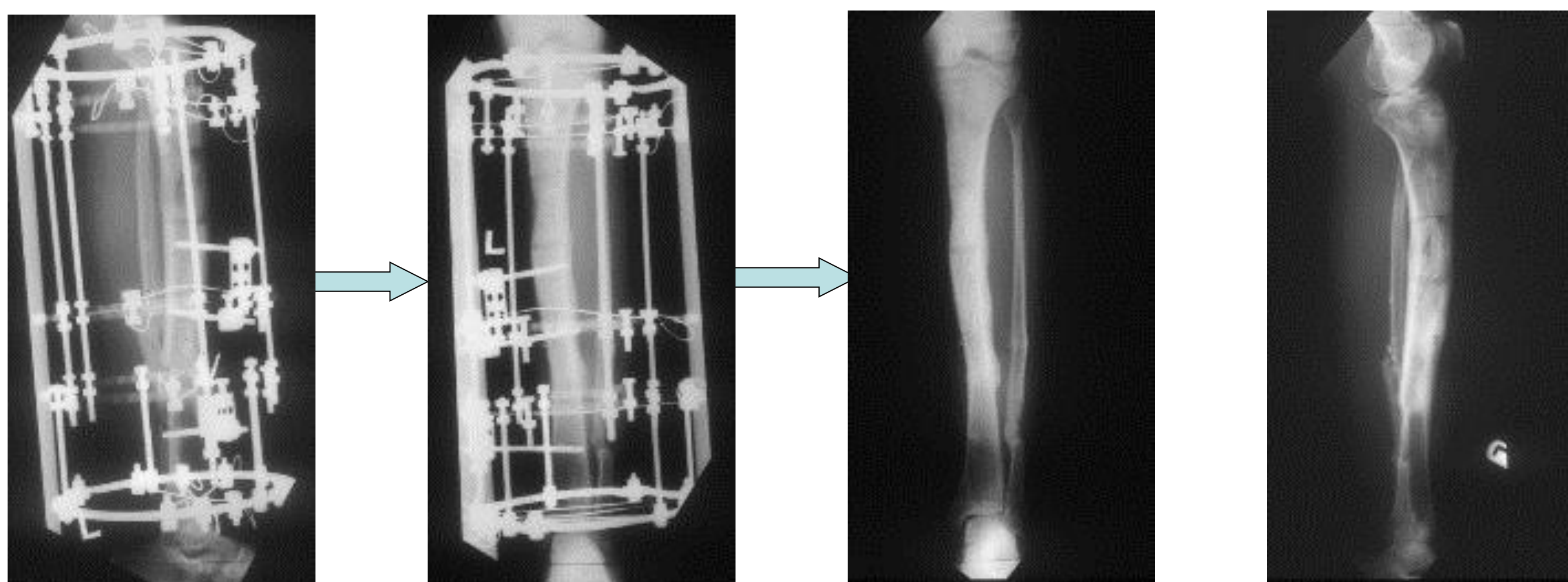
Meetings & Education : There are regular ward-based medical student and observer attachments. The unit presents the Oxford Bone infection Conference (**OBIC**) each year for microbiologists / ID physicians, orthopaedic and plastic surgeons, and nursing and allied health staff. See www.hartleytaylor.co.uk for more details.

Research agenda: There is an active clinical research group. The BIU led a multi-centre randomised controlled trial of oral versus intravenous antibiotics (OVIVA). We have described outcomes after debridement and retention or 2-stage revision, the outcomes after stopping long-term antibiotics and the microbiology of prosthetic joint infection and chronic osteomyelitis.



Osteomyelitis: Segmental resection, muscle flap.

Ilizarov bone transport



Union and consolidation

Frame off



Prosthetic Joint Infections



Diabetic Foot Infections



Spinal Infections

Selected BIU Publications

- Atkins BL, Athanasou N, Deeks JJ, Crook DWM, Simpson H, Peto TEA, McLardy-Smith P, Berendt AR and the OSIRIS study group. *Prospective evaluation of criteria for microbiological diagnosis of prosthetic joint infection at revision arthroplasty.* Journal of Clinical Microbiology. 1998;36:2932-2939.
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- Bejon P, Byren I, Atkins BL, Scarborough M, Woodhouse A, McLardy-Smith P, Gundle R, Berendt AR. *Serial measurement of the C-reactive protein is a poor predictor of treatment outcome in prosthetic joint infection.* J Antimicrob Chemother. 2011 Jul;66(7):1590-3. Epub 2011 May 11.
- Choa R, Gundle R, Critchley P, Giele H. *Successful management of recalcitrant infection related to total hip replacement using pedicled rectus femoris or vastus lateralis muscle flaps.* J Bone Joint Surg Br. 2011 Jun;93(6):751-4.
- Kugan R, Aslam N, Bose D, McNally MA. *Outcome of arthrodesis of the hindfoot as a salvage procedure for complex ankle pathology using the Ilizarov technique.* Bone Joint J 2013; 95-B: 371-7.
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