



## mind the gap

**Trainees have a variety of options to fill the gap between basic and higher surgical training. Tim Millar reveals how he used the time**

**T**he Bedford Orthopaedic Centre (BOC) is based in Umtata, at the heart of the former homeland of Transkei, in the Eastern cape of South Africa. It serves as a referral centre for a mainly rural population of approximately 4 million people. The BOC is run by an international staff of orthopaedic surgeons, medical officers, residents and medical students. Trainees from the UK and USA are regularly invited to spend time here to help with the workload.

Changes in surgical training in the UK have resulted in a reduction in operating opportunities for junior surgeons. Time spent abroad in well-structured and supervised training posts have been shown to alleviate this problem to a certain extent and, indeed, there are now formal

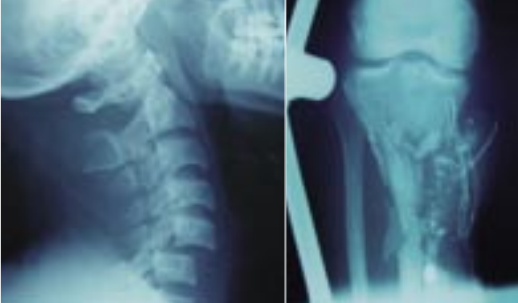
training posts in parts of the Developing World. These posts have been mutually beneficial for both trainee and supervisor, especially because of the staffing crisis faced by many hospitals in these areas.

There are a number of ways to fill the hiatus between basic and higher surgical training. Most trainees opt to spend time in senior SHO positions undertaking research to augment their CVs. I chose to spend five months in the former Transkei, a developing region in South Africa, working in a secondary referral orthopaedic and trauma hospital. This would allow me to gain valuable operative experience and undertake basic clinical research. I would also gain insight into a healthcare system very different from our

own and fulfil a personal ambition to work in the Developing World.

South Africa faces a dual epidemic of increasing trauma and HIV, placing heavy strain on an already over-prescribed health system. In addition, like many parts of South Africa, the former homeland of Transkei is still dealing with the oppressive legacy of apartheid. It remains one of the most underdeveloped regions with only basic orthopaedic provision. In 1984, a Scottish missionary surgeon, with the help of charitable funds, set up the orthopaedic service to provide healthcare to this impoverished region. This has expanded to the present day BOC, which has 200 beds including 30 spinal beds and eight high care beds. In addition, there is a 60-bed paediatric ward.

Nelson Mandela recently opened new operating theatres, with dedicated out patient and x-ray departments to facilitate care. The theatres are equipped to a high standard and there are few limitations on the management of orthopaedic conditions. Three theatres run every day and it is not uncommon for complex spinal surgery to be performed, mainly for spinal tuberculosis. Although it is now a government financed hospital, its running is heavily reliant on equipment donations and volunteer surgeons and anaesthetists of all grades. Three permanent consultant surgeons and visiting surgeons serve a population in excess



of 3.5 million, dealing with all orthopaedic conditions, except for bone tumours, which are referred to East London; three hours away by road.

High rates of tuberculosis, malnutrition, polio and, increasingly, HIV, in addition to gunshot wounds, tribal violence, and road traffic accidents mean that there is a staggering array of orthopaedic pathology. Much of this presents at a very late stage and many patients have already sought the services of traditional village healers. In addition, many are referred from distant district hospitals where treatment has failed. Patients regularly have to travel for several hours on dirt roads, often in uncomfortable vehicles and with inadequate analgesia, to be assessed in Umtata.

I was appointed to work on the busy 60-bed male ward joining two consultant surgeons, two medical officers and a single intern. Together we would split the emergency rota. The male ward would have two full day lists on Monday and Tuesday, a single full day list on Thursday and a half-day list on Friday. Except for the occasional electricity failure or water shortage there were very few interruptions to operating. We would run the joint fracture and orthopaedic

clinic on Wednesday, often reviewing more than 150 patients.

Most of the male patient workload was injury-related.

Over the course of four months we admitted 398 patients and performed 415 procedures in theatre (in addition, many patients had manipulations in the outpatients department and did not require admission). These included 357 trauma-related cases, with the majority being the result of motor vehicle accidents (52%). Assaults accounted for 24% of cases and gunshot wounds implicated in 7% of the trauma admissions. Delayed presentation of trauma was very common. During my stay I was involved in 327 cases, acting as principal surgeon in 247 cases.

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This included 81 manipulations, internal fixation of 27 femurs, 13 forearm fractures, 10 ankle fractures and 18 tendon repairs. We also performed eight limb amputations (mainly for trauma) and 10 split skin grafts. Only eight hip fracture fixations



were performed, reflecting the low life expectancy. I was also involved in transthoracic spinal decompressions for spinal TB and correction of clubfoot. In addition I was able to review textbook cases of arthrogyphosis, cerebral palsy, Blount's disease and rickets disease – cases rarely seen in the UK. Two board-certified surgeons would closely supervise my work. As well as gaining confidence as a surgeon, the placement has improved my understanding of orthopaedics and enforced the importance of applying basic principles in trauma care. Well-structured and supervised positions in the Developing World are mutually beneficial to both trainee and supervisor and as such should be encouraged as part of surgical training in the United Kingdom. ■

Tim Millar, Trauma Fellow, Royal Shrewsbury Hospital, Shropshire  
tmsmillar@hotmail.com