

## Year 5 Elective report

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Location: Royal Prince Alfred Hospital, Sydney

## Objectives:

Describe the common orthopaedic conditions that arise is Sydney and how this compares and contrasts with those in the UK.

- 2. Appreciate the multidisciplinary nature of trauma and orthopaedic care. Compare this with the service provided in the UK.
- Learn the techniques used in examination, assessment and management of an orthopaedic patient.
- 4. Improve anatomy knowledge relating to orthopaedic conditions. Spend time with a range of team members to gain a better perspective of the work involved.

The orthopaedic conditions that predominate the orthopaedic wards are varied. This is one of the interesting aspects of this speciality. A particularly common presentation is a fall, where the patient has suffered a fractured neck of femur; this is particularly common in the elderly female population and is associated with osteoporosis. The type of fracture that occurs determines the best way to manage the patient. Common options include a total hip replacement, a hemiarthroplasty or a dynamic hip screw, with a gradual return to activity as tolerated. In fracture clinic a different cohort of patients are seen. Patients were typically younger and had sustained trauma from events such as road traffic accidents, recreational activities, occupational tasks in addition to falls as above. Motorbike accidents were a particularly common reason for attending the fracture clinic. There were two types of fracture clinic that I attended; these were new patient clinics and follow up clinics. This allowed me to gain a greater appreciation of time scales and how the management of a condition changes with time. Each surgeon has a particular interest and a specialist clinic ran alongside fracture clinic to accommodate patients who has orthopaedic conditions in that specific interest. For example one of the doctors ran a hand clinic; in this clinic carpal tunnel syndrome was the commonest condition.

There are a wide range of health care workers involved in care orthopaedic and trauma cases. This is especially true as management occurs in a variety of settings. On the wards consultants hold a daily ward round to check progress of the patients admitted under their care, and follow-up patients in the short term post-operative period. Patients who are of concern or who are likely to encounter problems once the need for hospital based care has ceased can be offered a fracture clinic appointment with that consultant. Patients who have received an operation from a particular consultant in the past are usually automatically admitted to that team. The interns are responsible for the day-to-day recording of notes and tracking progress by liaising with the ward nurses. The nurses provide all of the care that a patient needs on a daily basis, from assistance washing and dressing to provision of new and existing medications. There were twice weekly trauma meetings where the radiological opinions of orthopaedic and radiology doctors could be shared. This ensured that the best possible course of management was instituted. There are regularly physiotherapists present on the ward to aid patients with mobilisation and to improve the patient's confidence and self reliance. Mobilisation starts as soon as the patient is able to tolerate movement; there is a progression from non-weight bearing, partial weight-bearing and to fully weight bearing. The physiotherapists are able to tailor specific exercise regimens for each individual at every stage. Occupational therapists are involved when a patient is being considered for discharge. An assessment is

made of the home environment and whether any specific changes can be made in order to allow the patient to live as independently as possible. This can involve making adaptation to the washing facilities or to provide ready meals by liaison with social services. A very similar provision is found in the UK, whereby all team members are in close contact with each other both in clinics and on the wards.

I independently organised to spend some time in intensive care & radiology departments as these both form integral parts of orthopaedic care. By seeing patients in a variety of settings I was able to track the patient journey from their first presentation to the emergency department, once stable transfer to the orthopaedic ward. Then when appropriate, the patient was taken to surgical theatres. In some cases a stay on the intensive care unit was necessary to enable the patient to receive high-level care facilitating their resumption of normal activities in the fastest possible time.

In fracture clinic I was often able to see patients on my own to practice my history-taking and examination skills. This opportunity also gave me experience in presenting to more senior doctors, and allowed me to formulate management plans, which could be reviewed to ensure the plan was appropriate. For my first time in a specialist clinic I saw patients with a more senior colleague to allow me to learn the salient points of the history and examination in order to complete a thorough assessment of the patient, with maximal efficiency. As these clinic were often very busy, as I developed my skills I was able to independently assist in the smooth running of a clinic. While attending and assisting in surgery I was able to observe the procedures that were performed and gain a better understanding of the biomechanics involved and the reason for a particular approach or procedure being offered. I was often able to see patients recovering from surgery on the ward, and how they progressed in the initial stages of their recovery.

The fracture clinic was an excellent area for clinical teaching and I felt thoroughly welcomed due to the offer of teaching from all members of the team at different stages of their careers. In particular at the end of fracture clinic, one of the registrars showed me some interesting radiographs and discussed the pathology demonstrated and gave me some guidance on interpretation and presentation of the film. This will be a very useful skill needed for my foundation years. Once I had acquired some of the clinical knowledge it was interesting to read up on the cases I had seen. The knowledge could then be reinforced by attending surgery to visualise the anatomy in-situ. In particular it was useful in a total knee replacement to get to handle the excised portion of bone and visualise the rough and irregular appearance of the cartilage. This explained to me why crepitus occurs in the knees of patients with osteoarthritis. Another opportunity for learning was in the trauma meetings are cases were discussed and important features of X-ray were highlighted to the team. The meeting was concluded by one of the team giving a short talk on an area of orthopaedics that was supported by evidence from the scientific literature. One example was a talk given on radial head replacements and the evidence for conducting a particular procedure including how to avoid common pitfalls.