

**HONIARA
ORTHOPAEDIC OUTREACH
JULY 2008
ORTHOPAEDIC REGISTRAR REPORT
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This Orthopaedic Outreach assignment was completed in Honiara, the capital of the Solomon Islands, between the dates of 26th July to 3rd August 2008. This trip was arranged in consultation with Dr Stephen Quain, Project Director of Orthopaedic Outreach to the Solomon Islands. The assignment was based at the only public hospital of the Solomon Islands, the National Referral Hospital. The outreach team consisted of 3 individuals. Dr Tim Keenan, an experienced orthopaedic surgeon from Perth, Dr Joe McGuinness, an experienced anaesthetist from Sydney, and myself, Dr Julian Yu, an orthopaedic registrar from Sydney. The local hospital orthopaedic unit consisted of 4 members, Dr Patrick Hou'asia (Consultant), Dr Alex Munamua (Accredited Orthopaedic Registrar), Dr George Kabwere (Unaccredited Orthopaedic Registrar), and Dr Sara Habu (Orthopaedic Intern).

The week consisted of daily combined elective and emergency trauma list, and twice weekly orthopaedic fracture clinics run on Tuesday and Friday AM. Clinic patients were also seen throughout the week on non-clinic days as presented. An additional clinic was scheduled on the Monday for patients to be reviewed by the outreach team. Ward rounds were conducted daily, sometimes with the outreach orthopaedic team. Grand Rounds was held on Friday morning.

Data entry for the assignment showed 16 operations performed during the week in association with the Outreach team. A total of 64 patients were reviewed in the orthopaedic clinics. It should be noted that the actual number was more, estimated approximately 80 - 100 patients, however, inadequate documentation was provided for all patients reviewed. Detailed data entry has been collected and presented attached with this report.

The National Hospital encloses more than 300 beds, with multiple wards ranging from the common medical, surgical, and orthopaedic wards, to include an obstetric, gynaecological, paediatric, mental health, and rehabilitation wards. The primary medical and surgical wards were located within the main building of the hospital. The other wards were scattered throughout the campus on mobile buildings. The continued construction of a teaching facility on campus with a modern library and lecture theatre was utilized for the grand rounds meeting. This building is funded by the Taiwanese Joint Community Program. The emergency department was heavily crowded during the mornings and evenings, with limited beds, resorting patients to lying on the floor. The hospital is located approximately 15 minutes drive from the national airport, and is situated on the coastal side of the town.

Accommodation was at the Solomon Kitano Mendana Hotel located 5-10 minute drive to the hospital. Rooms were adequate with air-conditioning. There is a large swimming pool, and two restaurants associated with the hotel, both provided clean and pleasant food. Wireless internet access was accessibly within the main restaurant and lobby area, with a service that was slow and unreliable at times.

The orthopaedic service of the Solomon Islands focuses on the orthopaedic unit of the National Referral Hospital. Referrals of patients from central and peripheral Honiara, was complemented

with patients traveling from neighbouring small islands. The unit provides a capable service with patients seen in emergency, the "walk-in" patients in the clinics, scheduled clinic sessions, and operations.

Most acute trauma is capably dealt with by the unit, with a higher propensity for use of external fixation for complex or open fractures. Elective procedures are also performed, though less frequently. Common surgical procedures include open reduction and internal fixation of forearm, supracondylar humeral, ankle, and femoral fractures. The majority of surgical indications were adequately managed. However, the stability of some fixation, use of suitable equipment (plates and screw sizes), and availability of appropriate hardware were suboptimal.

Radiology is limited to plain xrays, and occasional ultrasound. No facilities for CT or MRI are possible. Xrays are generally only available in the mornings. Post-operative films usually take several days to be performed.

As a young registrar, and the most inexperienced member of the Orthopaedic Outreach team, my role was complementary to the primary surgeon and anaesthetist. My identified roles included clinic participation, assisting in theatre, participating in ward rounds, formal and informal teaching, and data collection. The principal objective was not based on quantity of work completed, but to assist, advise and participate with the local team in developing a sustainable orthopaedic practice. The ultimate aim for the Solomon Islands, is to be able to self facilitate an adequate orthopaedic service to its population.

As a developing orthopaedic service, several major issues of significance are identified that preclude deliverance of optimal orthopaedic care.

The work ethic of hospital staff is relaxed without the efficient urgency of hospitals in Australia. As demonstrated on the operative data collected, a maximum of four operations were conducted on a daily basis. This was typified on each day, in which the operative list to commence at 8am, started at 9am to 10am. Perhaps the presence of two anaesthetist and two full day operating lists delayed the change-over of patients in theatre. Promoting a more urgent and efficient attitude may assist in the ability to perform more operations during the day.

Moral of the hospital staff was poor. Frustrations with lack of hardware and confidence from patients contributed to this for the orthopaedic unit. Most Solomon Islanders still seek initial consultation from the community bone setters. Consequentially, inappropriate initial treatment of orthopaedic injuries is seen. Of those who eventually present, healing fractures in unacceptable positions require open reduction. During this assignment, corresponding teams of Ophthalmologists and Taiwanese medical teams were also present. Theatre priority was given to the visiting teams, and subsequently, local units found operating team difficult to come by. Discussion with one of the general surgeons and current medical superintendent, revealed the lack of access to surgery was a contentious issue, which produced frustration amongst the surgical units. Despite this, I believe the overall morale of the orthopaedic unit to be healthy. The addition of more equipment and teaching of new skills from this current trip, improved the level of confidence and morale.

Infection is a common problem in the orthopaedic service, and one that at times, limits the surgical intervention provided. A recent audit performed by the orthopaedic registrar identified an estimated post-operative infection rate of 10%. This is significant particularly, due to the lack of long term management capacities of patients. Arthroplasty is uncommon performed, with note of a few series of hip hemiarthroplasties. The requirement for joint arthroplasty is certainly present,

