

The African Flying Doctors Service: an elective experience



An emergency evacuation in process.

32

I am currently a foundation year house-officer in Anaesthetics and Intensive care. My medical elective was based in Kenya and Tanzania working with the African Medical and Research Foundations (AMREF) Flying Doctors Service. In particular, I was interested in the acute care and transportation of critically ill patients.

The Flying Doctors Service (FDS) was established in 1957 by Sir Michael Wood, a British surgeon, and is now incorporated under the umbrella of AMREF. Today AMREF is the largest independent, non-profit, non-governmental organisation in Africa. The FDS provides emergency evacuations and care services to all parts of Africa. The service is based at Wilson airport, Nairobi and operates 24 hours a day, seven days a week. It communicates with over 120 base camps in Africa via high frequency radios. It has a fleet of helicopters, turbine and jet aircrafts, all of which are modified to provide and monitor life support. In addition, specific ambulances are used to transfer patients from the aircrafts to respective hospitals. On my trips, the crew comprised the pilot, flight nurse, doctor and myself. The crew rotated on an on-call basis and were ready to fly within fifteen minutes. The doctors were at least of registrar level, with a background in intensive care.

Essential life support equipment on board the aircraft was prepared and checked on a daily basis. This included oxygen cylinders, defibrillator, suction, spinal vacuum and a trauma Thomas pack. Evacuations were necessary for a variety of conditions including road, rail or air traffic accidents, war and tribal injuries, medical or surgical emergencies, infectious



The AMREF team at base

diseases or animal attacks. This unique workload is a challenge to the crew and is further increased due to time constraints and physiological changes occurring during the flight.

Our youngest emergency evacuation was a one day old girl who was born near the Somalian border. After a successful vaginal delivery, the local doctors noted a protruding mass from the baby's mouth. This mass was identified as a neocystic tumour and required urgent surgery, which was only possible in Nairobi, a three day journey by road. The baby was assessed and found to have a 7x8cm firm, non-pulsatile mass originating from her palate. The airway was secured using a nasal tracheal tube and the baby was transferred to the aircraft. She remained stable throughout the flight and was in Nairobi within two hours, where she underwent reconstructive surgery.

Kenya is well known for its wildlife: although a great tourist attraction, wild animals can pose a danger. One such occasion was an evacuation call from a game reserve in Gilgil, outside Nairobi. An English tourist was on a walking safari when he was attacked by a buffalo. The initial impact forced the man to the ground, after which he was stamped upon by the buffalo. Further nuisance was caused by animals as our plane could not land due to an elephant obstructing the makeshift runway! On arrival our primary survey focused on any penetrating injuries the man may have suffered from the horns of the buffalo. Thankfully there was no sign of such an injury, but he required fluid resuscitation, and was placed on a spinal board using the scoop and vacuum technique. He remained stable during the flight and was transferred to the trauma centre in Nairobi. The man's injuries comprised lumbar soft tissue damage and a rib fracture, but had escaped a potentially fatal attack. He later recalled that he had remembered to remain calm and lie flat (prone) on the ground in order to protect his abdominal organs – useful advice should one ever come face to face with an angry buffalo!

The elective period provides an opportunity for medical students to explore a variety of specialities, medical practice and culture beyond that of the NHS. My elective enabled me to gain an insight into anaesthetics and transportation of critically ill patients. Furthermore I was exposed to a variety of cases which I could only experience in a developing world environment.

However, anaesthetic-based electives are not popular with medical students as a whole. Reviewing the data at Leeds University it is apparent that over the previous three years only 4% of medical students had undertaken an anaesthesia - based elective. There may be a number of reasons for this trend. The Leeds medical course offers only a two week placement for medical students throughout their five years, which may also be the case in other medical schools. Alternatively anaesthetics may be viewed by many students as routine day surgery in theatres, which they may not view as the ideal elective experience in a tropical country! A period of experience in anaesthesia combines practical skills, applied physiology and management of critically ill patients, all of which provide learning beyond the medical school curriculum and are essential for life as a junior doctor.

As university fees and student debts continue to rise, there may be a lack of funding for anaesthesia electives. Therefore medical schools and anaesthetic departments should be encouraging students to pursue electives in a variety of anaesthesia - based environments. Students should be made aware of the funding provided for medical electives by national bodies such as Association of Anaesthetists.

The AMREF flying doctors service provided me with a unique opportunity to experience acute critical care and the challenges



One day old baby with oral tumour

of transporting patients in flight. My elective enabled me to also appreciate the work of anaesthetists beyond the theatre and encouraged me to pursue this as a foundation year one doctor.

Dr Milap Rughani

**Foundation Year One Doctor - Anaesthetics and Intensive care
St James's University Hospital, Leeds**

Chronic Pain Study Day for SpRs in Anaesthesia

26th March, 2007 - 8.45am – 5pm

Post Graduate Medical Centre
North Manchester General Hospital,
Delaunays Road, Crumpsall, Manchester. M8 5RB

**Lectures and Demonstrations
covering the syllabus for Final examination**

Places are limited. Early application is advisable

Topics covered

Neuro Physiology in Chronic pain, Drugs in Chronic pain, Cancer pain, Complex Regional Pain Syndromes, Post Herpetic Neuralgia, Back pain, Trigeminal Neuralgia, Neuromodulation, Acupuncture etc

Demonstrations of various Blocks with Image Intensifier

Stellate ganglion, Lumbar sympathetic, Coeliac plexus blocks, Trigeminal, Paravertebral blocks, Facet joint injections etc

TENS, Acupuncture

Group discussion of topics relevant to exam

Course Fee including lunch - £ 100.00

For Further information & booking - please contact

Kath Hoyle, Pain Management Unit, North Manchester General Hospital
Tel :0161-720-2520 Fax : 0161-720- 2651 Email: Kath.Hoyle@pat.nhs.uk

Organiser : Dr.R.Bhishma, Consultant in Anaesthesia & Pain Management
Approved by the Northwest Chronic Pain group & Regional training committee

5 CPD points applied for