

## **ELECTIVE (SSC5c) REPORT (1200 words)**

A report that addresses the above four objectives should be written below. Your Elective supervisor will assess this.

### **1. What are the most common admissions to A&E in Vietnam for and what infectious diseases are prevalent? How does this differ from the UK?**

The traffic system in Ho Chi Minh City is fairly disorganized, with very few traffic lights, no giving way at roundabouts and no enforced rules I could see. This paired with the primary mode of transport for the cities inhabitants being scooters or motorcycles with very little body protection leads to the primary cause of hospitalization: trauma. Most patients in the emergency department had casts, splints, bandages or abrasions marking their collision with the road. While abrasions were at one end of the scale at the other end, in ICU, were the serious head trauma patients. They do CT head for most patients after road accidents and it was educational to be able to look at so many CT and MRI images and see many different trauma related pathologies less frequent in the UK. I saw imaging of depressed skull fractures, subdural/epidural/subarachnoid bleeding, craniotomy and soft tissue damage. I also was able to see many long bone and rib fractures on x-rays as well as soft tissue damage and pneumothoracies as a result of the trauma.

While I'm aware infectious diseases make up a large percentage of the health burden in Vietnam, during my time in A&E I saw very little of it. We saw quite a few patients with viral hepatitis, predominantly B and C, though the issues with these patients appeared more to be due to chronic infection. I examined one jaundice patient with an epigastric mass for whom the working diagnosis was HCC. From my own study I am aware some of the more common infectious problems in Vietnam are TB, dengue, malaria and envenomation. There seem to be two main issues with infectious diseases in Vietnam; one is the majority of patients have little money or insurance and so present late when the condition is significantly worse and more complicated to treat and the other is antimicrobial resistance. I was speaking to one of the doctors who explained that they have a completely resistant strain of actinobacteria, which one of his patients currently had. He explained that it was resistant to all the antibiotics he had at his disposal and he was struggling to treat these patients. So far he has had 10 patients with the resistant strain of which 8 have died from the disease.

During my time in A&E I also saw other presentations, which were fairly reflective of the types of admissions back home. Among other things I saw: exacerbations of COPD, jaundice, organ masses, hepatosplenomegaly, pneumonia, SLE, cushingoid appearances, hirsutism, thrombus, cellulitis, and sepsis. One of the main differences in the patients seen in the UK and those in Vietnam is that most of the patients here also suffer from malnutrition and dehydration which means the patients are often more frail and all patients in A&E are on a saline drip.

### **2. How are emergency admissions dealt with in Vietnam and what facilities are available to them in comparison to the UK?**

The emergency department in Cho Ray was very busy in comparison to the UK; due to the limitless nature of the medical system everyone is placed on a gurney in the main A&E room regardless of space. The overcrowding of Cho Ray is hospital wide, with a total of 1,800 beds and an average of 2,423 patients in any given day. The static beds in A&E had 2 to a bed on most days and 3 when particularly busy and gurneys with other patients were crammed into any space available in the room.

They have a system at admissions, whereby they separate all the presenting patients into two categories; trauma and everything else. All trauma notes receive a red stamp to indicate the presenting complaint. The patient's also

receive a coloured wrist bands which indicates their level of priority; red for the very unwell urgent cases, yellow for moderate, and green for low priority. As a tertiary referral center a considerable amount of the patients arrive already having been through a primary and secondary survey with some management already in place, such as strapping or casting of damaged limbs. Further assessment is carried out at Cho Ray including blood tests and extensive imaging. All trauma patients undergo a FAST scan, x-rays of the damaged area and a head CT.

The facilities available in Ho Chi Minh are comparable to the UK; we saw a patient who had a spontaneous subarachnoid bleed seen on MRI, who then underwent a CT Angio within 2 hours and was referred to the neurosurgeons for clipping. I have found the system very efficient here and there appears to be no shortage of advance technology. However as the hospital has no limit there is a shortage of some of the more basic equipment. In the ICU in the emergency department they only appear to have 2 cardiac monitors, and if another one is required the patient is attached to a defibrillator. Then while I was in CCU I saw a couple of the patients had plain clothed people standing by their bedside compressing something; the doctors explained to me that they didn't have enough ventilators, so should more patients require ventilation then they have someone manually ventilate the patient.

### **3. How is acute chest pain managed in Cho Ray emergency department?**

Acute coronary syndromes (ACS) are the most common cardiac presentation to Cho Ray hospital. The algorithm for acute chest pain is essentially the same as in the UK. They first ascertain whether the chest pain, if cardiac in nature, is due to STEMI, NSTEMI or unstable angina. As in the UK, this is carried out via ECG in the ambulance and the leg of the treatment algorithm followed as appropriate. The golden treatment of STEMI is primary PCI which is carried out at Cho Ray hospital. Should a STEMI be identified at presentation they would be taken straight to the Cath lab with an aimed door to balloon time of 90 minutes. Should the hospital to which they present not have the capabilities of PCI, then the algorithm dictates if they can reach a PCI hospital within 120 minutes they should be transferred and if the transfer time is likely to be greater than 120 minutes they should undergo thrombolysis prior to transfer for rescue PCI. Post-PCI and stenting dual antiplatelet therapy is recommended and they currently follow the same guidelines as the UK with aspirin and clopidogrel as first line.

To enable me to learn more about cardiac care in Cho Ray I spent some time in the CCU within the cardiac wing. It was a different experience being on one of the wards compared to the emergency room, while still overpopulated with patients; it seemed quieter than in the emergency department as there was not a constant stream of patients coming in. It was very interesting spending time in the CCU, where there are many ill patients with interesting cases and signs and I was able to observe a cardiac arrest and management.

### **4. To experience working in the emergency department in a developing country and reflect on if the specialty is one I would want to pursue.**

It was interesting to observe the workings and differences between the A&E here and in the UK. While emergency medicine is very interesting to me, I enjoyed my time in the CCU at Cho Ray Hospital more as I find cardiology fascinating and was great to see congenital conditions rarely seen in the UK now.