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ACCIDENT + EMERGENCY

Elective Report

OBJECTIVES:

1) **To look at the different presentations to an emergency department in a large rural Indian town, especially with regards to trauma and Ischaemic Heart Disease (IHD)**

Spending time within the emergency department of PIMS allowed me to see the variety and occurrence of different diseases acutely presenting to A&E. As suspected, the majority of cases revolved around thrombo-embolic disease, mostly as myocardial infarctions or cerebro-vascular accidents. Surprisingly though, a large majority of cases were acute exacerbations of Chronic Obstructive Pulmonary Disease (COPD), which I learnt was an extremely common disease in rural Punjab, mostly caused by dust and smoke pollution. A particularly interesting case I saw in A&E was one where a middle aged lady with a background of Type 2 Diabetes Mellitus (DM) had presented with an occulo-motor nerve palsy due to a brainstem thrombo-embolic stroke. It was evident that she was unaware of the cause of her condition and didn't really understand what had happened to her, and was extremely upset and embarrassed, as it effected her not only medically but also aesthetically. Our consultant explained on the ward round that it was her diabetes that had caused her condition, and that better control of it would stop these complications from occurring, but she was clearly upset and didn't seem to hear what he had said. This situation highlighted the importance of patient awareness and keeping patients informed of their condition, particularly with regards to diseases that may be especially confusing and upsetting to the patient, such as in this case. I also saw that, regardless of country or patient background, patient autonomy was extremely important, and the breaking of bad news should always occur in a suitable environment.

I was keen to see how common a presentation trauma cases were at PIMS. I found that it wasn't common; I saw one trauma case during my time at PIMS, a lady had fallen off her bike outside the hospital, and she was suspected to have had a cranial bleed. A CT was done at a nearby hospital and it was inconclusive for any intracranial bleeding. I suspect the lack of trauma presentations to this hospital were not due to the fact that there was less trauma in Punjab, but more due to the fact that this hospital was a relatively new one, and had not acquired a CT scanner and other important investigative modalities needed in trauma cases. These cases were more likely to be taken to the nearby hospital to be managed.

2) **To look at the pattern and epidemiology of IHD in the Punjabi community in India, and comparing it to patterns of IHD seen in Punjabis in the UK, especially comparing risk factors for the disease in both countries.**

IHD is very common in Punjabis, mostly due to the fact that risk factors for the disease are highly prevalent in this community due to high cholesterol diets, sedentary lifestyles and genetic influences. I was expecting IHD to be prevalent in Punjabis in Punjab to the same extent as Punjabis in the UK, but I was curious to see whether or not risk factors for the disease were the same in Punjab and the UK, i.e. diet, alcohol intake, hypertension, diabetes and activity and exercise levels.

Spending time in the out-patient general medical clinic allowed me to assess how common IHD was in the community and what risk factors it was most associated with. I found that it was common, but more common were risk factors associated with it, in particular Type 2 Diabetes Mellitus (DM) and Hypertension; one in two patients seen in the clinic had Type 2 DM diabetes. I felt that the main factor influencing the prevalence of IHD and its associated diseases was awareness, which was greatly lacking in Punjab. Punjabis were aware that sugar caused diabetes and it was important to be active, but they weren't aware of the complications of these diseases, what they could to reverse or prevent them and how important risk factors were in causing them. Whereas in the UK, awareness of how these disease can be controlled, and what occurs if they aren't is higher, prompting patient to take active care of their own health, therefore allowing better control and in some cases the prevention of Diabetes and Hypertension. The community in Punjab were less active in taking care of their health than Punjabis in the UK, having more sedentary lifestyles and, due to lack of awareness and understanding, diets very high in LDL cholesterol and sugars.

Therefore, I feel that the prevalence of diabetes and heart disease in Punjab was slightly higher than in the UK, mostly due to a lack awareness about these diseases leading to poorer diet control. A factor that also may have had an effect on the prevalence is a lack of new medication and research of these diseases in India compared to the UK, which is at the forefront of research into IHD and its prevention.

3) **Helping to clerk, diagnose and manage patients within the emergency department under supervision, and learning how to deal with a variety of different cases that may come into the hospital.**

I was able to examine and speak to a variety of different patients during my time at PIMS. I also saw a number of interesting signs during examining patients. I performed number of respiratory examinations on patients presenting with shortness of breath. This allowed me to gain experience in spotting clinical signs, particularly those associated with COPD, and follow them up through viewing patient X-rays and consulting senior doctors. Seeing and helping manage an acute presentation of COPD in A&E was a daunting but exhilarating experience.

4) **Aim to be a part of the team during my elective period. Learn how to interact with, and build rapport with patients in a foreign country using the skills I have learnt at medical school.**

I greatly enjoyed becoming part of the team during my time at PIMS, and used skills that I honed during my time at medical school to build rapport with patients that I came into contact with and work efficiently with my peers in a team. Although I felt that the language barriers may have been a slight hindrance to this, I was still able to interact within the team to enable me to understand and treat patients to the best of my ability.