# Trauma and Intensive Care Units, Royal Melbourne Hospital, Melbourne, **Australia**

### INTRODUCTION

I undertook my elective at the Royal Melbourne Hospital (RMH), Australia. During this time, I rotated through endocrinology and ICU.

My motivation for choosing Australia was two-fold: it constituted an opportunity to experience a different healthcare system whilst working in an environment not too dissimilar to the NHS. I hoped to transfer knowledge and skills learnt during my elective to practice back in the UK. A further attraction was the absence of a language barrier, which would allow me to learn quickly and effectively. Given the current state of the NHS and the proposed introduction of the new junior doctor contract, my awareness was heightened to claims of greater job satisfaction in Australia. In other words, I was going to see for myself whether the grass really was greener on the other side!

# THE ROYAL MELBOURNE HOSPITAL

I chose the Royal Melbourne Hospital (RMH) because of it's central location and reputation as a Level 1 trauma centre<sup>1</sup>. I have always been interested in acute and critical care, something which was enhanced by my 4th year ACC placement. For this, I was placed in a DGH (District General Hospital) and whilst a useful teaching opportunity, I felt it lacked the excitement and drama of a regional trauma centre - an experience many of my colleagues enthused about. By contrast, RMH is a tertiary level referral centre with highly specialised critical care facilities<sup>1,2</sup>. It is one of the largest hospitals in Melbourne with a capacity of 1400 beds<sup>1</sup> and is located in the centre of the central business district. Melbourne has a varied demographic, and as such the Royal Melbourne is responsible for treating a diverse cross-section of patients<sup>3</sup>. This includes the local aboriginal community as well as a large migrant patient population, for whom language and differences in culture pose a significant barrier to healthcare access4.

Within Australia, much like the UK, there is a defined public and private sector. RMH is based within the public sector and whilst services were rationed based on clinical need, the strain appeared far less than in the NHS. Healthcare is delivered primarily by Medicare, a state funded healthcare system which is free at the point of delivery<sup>5</sup>. Although a government-led service, there is variation in policy between individual states<sup>5</sup>. Despite this service, many Australians, choose to pay for private healthcare insurance, which in turn alleviates pressure of demand on the public sector.

# AIMS & OBJECTIVES:

My primary aims were:

- i.To develop skills and knowledge transferable to my future practice as a junior doctor, whilst at the same time gaining experience of a healthcare system with different cultural groups to that of the UK.
- To gain first-hand experience of the Australian healthcare system and working environment, to see if this would be a country in which I would like to work in the future.
- To gain greater clinical experience in acute and critical care. Develop confidence in managing the critically ill patient, building upon the skills and knowledge gained in the RRAPID element of the Leeds MBCHB course.
- After having spent a year gaining specialist knowledge, I wanted to refresh my general medical knowledge ahead of 5<sup>th</sup> year. In particular, to extend my skills in history taking and clinical examination. **ELECTIVE ACTIVITIES**

During my time at RMH, I participated in ward rounds, attended clinics and was involved in educational activities such as teaching and simulation. I had the opportunity to lead handovers and perform many of the roles expected of an FY1 doctor; as such it was extremely useful preparation for 5<sup>th</sup> year as well as my future clinical practice. On endocrinology, I spent most mornings with the "residents", equivalent to UK foundation doctors. Here, I was able to consolidate clinical history and examination skills as well as basic skills such as venepuncture and cannulation. The remaining time was spent in clinics, where I was encouraged to conduct my own clinic lists and with supervision, formulate management plans. On ICU, I had the opportunity to participate in procedures such as central lines and intubation. This was in addition to ward rounds, where I was encouraged to present complex patient histories.

## **CASE DISCUSSION**

On reflection, I experienced a number of notable cases during my time at RMH. However, there is one case in particular, which I feel warrants further discussion: a patient with whom I had contact with during both my endocrinology and ICU rotation. The patient concerned was a 39 year-old aboriginal man (Mr. X), who presented in type 2 respiratory failure secondary to severe bronchospasm. He presented with worsening dyspnoea following a 2-week history of coryzal type symptoms including dry cough and intermittent fevers, for which he received no medical care. Initially, treated with nebulised salbutamol and oral prednisolone, Mr. X's condition deteriorated and ultimately required intubation and transfer to ICU.

A type 1 diabetic (T1DM), the physiological stress induced by the bronchospasm triggered a diabeteic ketoacidosis (DKA) (blood gas pH 7.1, blood glucose of 38mmol/l and blood ketones 5mmol/l). Blood gas results revealed a mixed respiratory and metabolic acidosis; requiring both endocrine and intensivist input. Management of his DKA involved rehydration with crystalloid fluids and an insulin/potassium infusion.

Medical records revealed extensive alcohol and drug history as well as a long-standing history of T1DM with poor compliance. This was further suggested by a right transmetatarsal amputation for complications of peripheral neuropathy. There was also note of previous criminal convictions.

Examination findings were as follows: Mr X was intubated, sedated and paralysed.

A: The patient was intubated with an endotracheal tube measuring 7.5mm and 23cm at the lips.

B: Oxygen Saturations were 97% on FiO2 100%, ventilatory support (SIMV – synchronised intermittent mechanical ventilation). Air entry was equal and bilateral with symmetrical chest wall movement. A prolonged expiratory phase with wheeze heard on auscultation.

C:BP 84/50, MAP 58, HR 82, peripherally cool with a delayed capillary refill time of 4 seconds. No audible murmur. Mr X required boluses of matrimonial to maintain SBP > 80 and a MAP > 55

D: Afebrile. GCS 3 (E1, Vt, M1) - patient was intubated, sedated and paralysed. BSL 35mmol/l

E: Abdomen soft and non-tender.

Lines:

- (1) CVC (Central Venous Catheter) inserted and position in subclavian confirmed by CXR and blood gas aspirates.
- (2) Right radial arterial line in situ
- (3) Bladder catheter in situ

After three days in ICU, Mr X was successfully extubated and we were able to take a more detailed history. It became evident that Mr X was socially isolated having previously resisted all medical and social intervention. The formal organisation of western society i.e. our norms, rules and customs are antithetical to the Aboriginal way of life<sup>4,5</sup>. This manifested itself as a barrier for Mr X resulting in his previous failure to access appropriate care. Although, staff members maintained professional throughout treating Mr X, I observed that they lacked the empathy so clearly demonstrated to other patients. There was an unsaid disapproval that his medical deterioration was self-inflicted, which in turn contributed to a paternalistic approach towards him. I saw how this approach created a viscous cycle resulting in Mr X withdrawing further from medical advice, such that three weeks later he was readmitted with a further episode of DKA. I was advised that this pattern was not untypical for patients from an aboriginal background<sup>4,5</sup>. I was shocked by the degree of cultural insensitivity and the importance of appreciating cultural differences so as to remain non-judgmental. OVERALL REFLECTION

I found many aspects of Australian public healthcare to be similar to the NHS, namely the standard and quality of medical care. However, there were definite differences between the two, mostly due to the varying cultural groups that exist within Australia. For example, there is a huge disparity between aboriginal and non-aboriginal communities, with members of the indigenous population inherently disadvantaged. I observed a definite paternalistic attitude towards such patients and in my opinion a shameful disregard for their autonomy. This disparity is highlighted in the above case where Mr X's physical and social neglect was such that he was at a point of absolute desperation. The paternalistic and controlling approach employed by previous medical staff had alienated Mr X such that he had come to avoid seeking medical attention. To me, the economic and cultural divisions seemed far more pronounced in Australia than in the NHS.

Above all, I have taken away the importance of holistic and patient-centred care, and seen how the attitude of "the doctor knows best" can be to the detriment of the patient. There did not appear to be the same emphasis on communication or patient choice, as I have experienced in the UK. It was on these occasions, I felt proud to be training in a system where doctors are encouraged to seek out their patient's concerns, allowing for shared decision-making.

Overall, I had an absolutely fantastic elective experience, both medically and culturally and on reflection, I do feel that I have satisfied my aims and objectives. I have gained knowledge and enhanced skills, which I will ultimately be able to transfer to my working practice. Through attending simulation training on airway management and being actively involved in a patient's resuscitation, I do feel more confident in managing a critically ill patient; something, which will be invaluable to my future working practice. During my time at RMH, I also gained experience in managing emergency conditions such as DKA, something with which I am expected to be familiar as a foundation doctor.

And so, in answer to whether the grass is greener on the other side, I would say that there are certain attractions, which would undoubtedly appeal to any doctor looking for a change in working environment, not least the weather and less strained resources! However, as I prepare myself for life as a junior doctor working in the NHS, I can be satisfied with the quality of care that is provided and which hopefully, I will help to deliver.

#### **REFERENCES**

- (1) The Royal Melbourne Hospital. About RMH. 2016. Available at: https://www.thermh.org.au/about/about-rmh(Accessed 13/09/16)
- (2) The Royal Melbourne Hospital. Intensive Care Unit. 2016. Available at: https://www.thermh.org.au/health-professionals/clinical-services/intensive-care-unit (Accessed 13/09/16)
- (3) Australian Government: Australian Bureau of Statistics. 2016. Available fromhttp://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0 (Accessed 13/09/16)
- (4) Australian Government: Institute of Health and Welfare. The health and welfare of Australia's Aboriginal and Torres Strait Islander people an overview. 2011. Available
- from: http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=10737418955 (Accessed 13/09/16)
- (5) Australian Government: Institute of Health and Welfare. 2014. Available
- at: http://www.aihw.gov.au/australias-health/2014/health-system/ (Accessed 13/09/16)

Sophie Ellis Leeds