Jake Tobin Elective Report 2017

With the help of the Renal Association, I was able to spend a month-long Elective stint in Wellington Regional Hospital, New Zealand, gaining experience in various aspects of clinical nephrology. I chose to travel to New Zealand, as I wanted to work in a developed healthcare system, where any new knowledge I picked up would likely be applicable to clinical practice in the UK. However, it would be disingenuous to deny that the New Zealand scenery influenced my decision-making process at all!

I spent most of my time on the hospital's Renal Ward, where I was able to help out with tasks such as writing notes on the ward rounds, completing blood form requests, and practical procedures such as venepuncture, cannulation and catheterization. Wellington's healthcare is structured such that less 'complicated' patients are often seen in district hospitals throughout the region, whereas Wellington Regional hosts patients with rarer conditions, or multiple morbidities that need multidisciplinary input. As such, my shadowing frequently took me onto other wards to see 'outliers', as well as into the ICU and ED. I was able to see pre-operative and post-operative transplant patients, as well as conditions such as vasculitides, glomerulonephritides and reflux nephropathy. I derived great educational benefit from observing biopsy meetings, which gave me an increased understanding of the importance of histology to formulating and refining a renal diagnosis, and both general and specialist renal clinics. Finally, I also joined the team on ward rounds to the Dialysis Unit. As well as being informative clinically, this was an eye-opening experience from a public health point of view. Despite making up only 15% of the population, the Maori people were almost as well represented as non-Indigenous peoples on the Dialysis Unit, and it was interesting to see how renal physicians in New Zealand had to have culturally sensitive discussions about lifestyle choices, in an attempt to overturn this huge demographic bias in population health.

In addition to this general clinical experience, I took the opportunity to engage in some clinical project work, with a view to enhancing my portfolio, whilst helping out the Department in carrying out useful work on their behalf. The Director of Nephrology revealed that there were only sparse formal guidelines for the dose adjustments needed for a wide range of common antimicrobials for patients undergoing intermittent haemodialysis, as well as for those on peritoneal dialysis. To this end, I undertook a miniature review of the relevant literature, and with the use of a range of pharmacology texts, was able to publish draft guidelines for the dose adjustments and timing considerations needed when prescribing for dialysis patients. The information I compiled included: whether a drug was suitable for dialysis patients; whether it was dialysed by either method; how the dose needed to be varied for different clinical scenarios; how best to calculate the patient's weight, should body weight dosing be indicated (renal patients may well be volume overloaded prior to haemodialysis, such that third space fluid makes up an appreciable fraction of their measured body weight); how best to monitor antimicrobials with a narrow therapeutic window; and how best to time the administration of the drug on dialysis days, in the context of intermittent haemodialysis. These guidelines were approved by my supervisor, and should serve to aid medical registrars with relatively little specialist renal experience covering the Dialysis Unit as part of their duties on the general medical take.

The benefits I derived from my elective were numerous. Spending time with nephrologists in clinic, I was able to iron out any uncertainties I had about particular topics within renal medicine that had cropped up on my course. I got very focused tuition, being the only student attached to the team, whilst the local students revised for exams and had their Winter holidays. I was also able to learn a great deal of general internal medicine; in Wellington, nephrologists seemed to be called upon to review nearly every inpatient with any tangible link to renal disease – be it a previous transplant recipient in for an unrelated reason, or a surgical patient with a post-operative AKI. Apart from generating long and rather hectic ward rounds, this gave me exposure to a lot of different specialties and pathologies, whilst showing me the importance of a broad medical knowledge to the renal physician. Overall, this Elective gave me clinical experience in Nephrology that I had never previously gained due to my University rotations so far. It taught me a great deal of general and specialist medicine, and gave me a realistic insight into a specialty in which I am strongly considering a career.