Medical Elective 2014 (Part 2)

Student: Rícheal Ní Ríordáin

Subject: Dermatology

Location: Waikato Hospital, Hamilton, New Zealand

Dates: 21/04/14 – 16/05/14

Supervisor: Honorary Associate Professor Amanda Oakley
Consultant Dermatologist, Department of Dermatology

Objectives

1. Provide a brief overview of cutaneous malignancy in New Zealand
2. Describe the provision of dermatology services based on your elective experience and compare with services you have come across in the UK
3. Discuss the role of telemedicine in dermatology
4. Outline areas of clinical practice in dermatology that I would like to emulate my career

Report

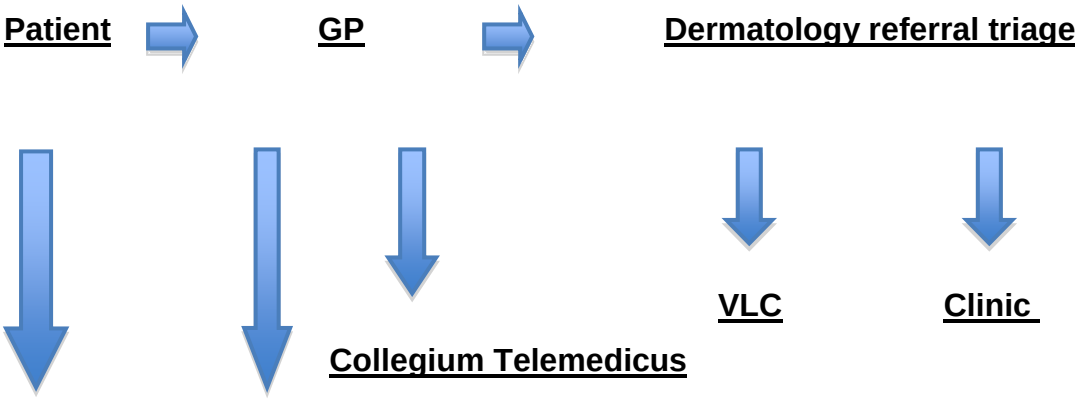
My time in the department of dermatology at Waikato Hospital has been both enjoyable and educational. I have learned a great deal about the diagnosis and management of various dermatological conditions, from itchy children with atopic dermatitis to teenagers with troublesome acne and adults with recalcitrant psoriasis. I have also been exposed to varying consulting styles, which will undoubtedly shape my own patient interactions in the future.

Part of the weekly timetable that greatly interested me was the Virtual Lesion Clinic (VLC). Telemedicine was not something that I had used whilst working in oral medicine practice and this was my first exposure to the use of

teledermatology. Teledermatology consultations can take place using real-time technology, where a virtual live consultation takes place, or via store-and-forward (SAF), where details of the patient's history along with skin images are sent electronically to the dermatologist for consideration. It has been proposed that, with an efficient infrastructure in place, teledermatology can enhance dermatology services by providing 'better, cheaper and faster care', provided patients are appropriately triaged, high quality images are used and dermoscopy is employed with pigmented lesions[1]. It is of particular importance in providing access to dermatology services for patients in rural communities. The VLC in Waikato Hospital uses the SAF format. Patients referred with lesions of concern from the general practitioner (GP) are seen by a dermatology nurse who takes clinic photographs along with dermoscopy. These images are then reviewed with the patient history in the VLC, where diagnoses and recommendations are made. GPs can also avail of the expertise of a dermatologist via the Waikato Collegium Telemedicus. This is a telemedicine network, which facilitates the secure transfer of patient information and images. This telemedicine network has not only been adopted in New Zealand but also in the UK, US and Australia[2].

When looking at the provision of dermatology services in Waikato (figure 1) we can see that teledermatology provides additional pathways for accessing dermatology care in the region.

Figure 1. Diagrammatic representation of referral pathways in dermatology



Although I have not encountered teledermatology in my brief exposure to dermatology in the UK that is not to say that it is not being used. According to the literature attempts have been made to incorporate telemedicine into the provision of dermatology services in the UK[3] with a report on the use of teledermatology in Cardiff, for example, published by Crompton et al in 2010[4]. In a 2010 British Association of Dermatology position statement the society recommended that the use of teledermatology should be limited to 'highly integrated primary care/secondary care teams' stating that further research into the efficacy, reliability and economic viability was required before incorporating it into routine dermatology care[5].

Another element of my elective placement that made a huge impression on me was the close collaboration between dermatology, pathology, oncology and plastic surgery in the care of patients. This was particularly evident in the management of patients with cutaneous malignancies. Due to the high levels of ambient solar ultraviolet radiation in New Zealand skin cancers are very common amongst patients with white skin[6]. Cutaneous malignancies can be broadly classified into melanoma type and non-melanoma type malignancies (mainly basal cell carcinoma and squamous cell carcinoma). According to the Melanoma Foundation of New Zealand the country has the highest rate of incidence of melanoma worldwide[7]. Registration of non-melanoma skin cancers is not required in New Zealand but it is estimated that there are approximately 67,000 new cases diagnosed annually[8]. Weekly meetings take place in the hospital where cases are discussed with input from each discipline along with separate weekly dermatology/pathology meetings where clinical and dermatoscopic images are closely correlated with patient history and pathology specimens. This process certainly aids the accurate and timely diagnosis of cutaneous malignancies, which is critical in a country with such high rates of disease.

In conclusion, my time in Hamilton has been very fulfilling, as I have been made part of the dermatology team from the outset. I have learned a great deal about a wide range of dermatological conditions, patient-clinician interactions and the importance of the multidisciplinary approach to the

management of cutaneous malignancy. This elective has also stimulated an interest in the telemedicine, which I hope to explore further on my return to the UK.

References

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