DERMATOCOGY

ELECTIVE 2010/11

JUGAL PATEL

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An elective in Dermatology

Placement: Whipps cross university hospital

Consultant: Dr Anthony Bewely

Having enjoyed the dermatology module in year 4, and working on various case studies as part of an SSC in psychodermatology, I would now like to further enhance my knowledge and skills within GENERAL DERMATOLOGY during the year 5 elective.

I feel that by undertaking an elective in dermatology within the UK will be to my advantage as I am confident that all my personal learning needs will be met, especially after the lack of responses from contacts and hospitals from abroad.

I would like to take advantage of the 5 week period to attend as many dermatology clinics/day surgery as possible. Such experience will be useful not only if I decide to become a dermatologist, but also in general practice.

The 4 objectives (the first two objectives set by the university) for this elective are listed below. These will be written up as a 1200 word report.

1. **Describe a case seen at a dermatology clinic. Describe the epidemiology of this condition within the UK and how does this compare globally?**
2. **How are services provided by the dermatology department organised and delivered. Is there room for improvement?**
3. **Describe health promotion strategies for a disease (e.g. skin cancer) and provide some statistics to show their effectiveness.**
4. **Some self reflection: based on the experience gained during this elective, would I consider a career in Dermatology?**

1) **Describe a case seen at a dermatology clinic. Describe the epidemiology of this condition within the UK and how does this compare globally?**

Case

An 81 year old man, who previously worked in the army presents to the dermatology out patient clinic with a two week history of a lesion on the dorsum of his right hand. The lesion has been increasing in size and tender around the edges, however does not bleed or itch. The patient has not had any skin cancer in the past, nor has there been any family history of skin cancers. The patient is an ex-smoker with 10 pack years, who has had previous sun exposure in tropical areas whilst working in the army. The patient has never used sun beds. The patient suffers from hypertension and has previously suffered a stroke 1 year ago and is currently on Simvastatin, Losartan, and aspirin with no known drug allergies to any medication.

On examination the patient looked well at rest, had type 1 skin with an ulcerated nodule with thickened edges on the dorsum of his right hand, measuring 1.5 x 1.2 cm.

Diagnosis: Squamous cell carcinoma (SCC). Treatment: excision.

Epidemiology

SCC is the second most common skin cancer, usually arising from pre-malignant conditions such as Bowen's and actinic keratosis. In the UK, SCC accounts for 20% of all NMSC. The true incidence of NMSC in the UK is estimated to be 100, 000 per year with an increasing annual rate of 3-8%. However the death rate is less than 400/year and these are due to metastatic SCC (Rajpar et al., 2008). SCC tends to be more prevelant at lower latitudes, and more common in males. For example the incidence is 1000 per 100000 person years in Australia, compared to 30.2 (males) and 14.1 (females) per 100000 person years in Sweden (Hemminki et al., 2003).

SSC is strongly related to cumulative ultraviolet light exposure and therefore occurs at sun exposed sites such as the head and neck, dorsal surfaces of the hands, forearms, and lower legs. The risk of SCC increases exponentially after the age of 60. Patients with fair skin are at more risk of developing SSC than patients with darker skin. In blacks and Asians, NMSC is 70 times less frequent. Immuno-suppression also increases the risk of SCC by a factor of 6-250 (Rajpar et al., 2008).

2. **How are services provided by the dermatology department organised and delivered. Is there room for improvement, when comparing to other countries?**

The first health care professional a patient will present to is his/her general practitioner (GP). Depending on the condition, clinical examination findings and results of initial investigations (e.g. blood tests), the GP will start the initial management, e.g. antibiotics for acne, emollients for eczema. The patient is referred to a dermatologist after treatment fails to improve symptoms which then may require more potent agents (e.g. immuno-suppressants) or simply when the diagnosis of a particular skin condition is uncertain/ suspicious. Care provided by the dermatology department is usually provided as an out-patient appointment following a referral letter from the GP. As with all conditions, the management the dermatologist will offer will either be conservative (if benign), medical (initiate/or change medications), or surgical (excision). The treatment, if medication is then continued by the GP. Appropriate follow up is provided either by the consultant or the specialist nurse to monitor the patient's progress, in terms of symptoms, side effects and compliance to therapy.

Problems with care provided by the dermatology department is related to missed appointments, poor compliance with treatment, patients not being satisfied with the outcome, waiting time in clinics.

Changes that are taking place include more dermatology clinics in the community as opposed to hospital outpatients, with an increasing number of GPs with specialist interest in dermatology being recruited. In this setting, the consultant dermatologist attends fortnightly/monthly to deal with the most complex cases. One could suggest that this eases the load at the hospital out-patients.

In most hospitals, information sheets are also available for patients and one study has recently shown that this is a cost effective method for improving patient satisfaction and reducing the number of complaints (Pothier et al., 2006).

'Photo-triage' whereby images of the patients skin condition are reviewed by a consultant is another experimental clinical method described in one study that may be cheaper than the conventional care described above, and reduce hospital visits (Morton et al., 2011). However whilst images may be useful for rashes, one could argue that important diagnoses such as melanomas may easily be missed.

3. **Describe health promotion strategies for a disease (e.g. skin cancer) and provide some statistics to show their effectiveness.**

Information promoting skin care and preventing skin cancers is available to patients via numerous sources. These include direct conversations with healthcare professionals, leaflets, posters and websites (e.g. NHS, British association of dermatology, and British skin foundation).

Health promotion is aimed at reducing the risk of developing a condition. The most important modifiable risk factor for skin cancer is sun exposure. Non-modifiable risk factors include fair skin, and people with loads of moles. Sun safety tips provided by the World Health Organisation include covering up in the sun, wearing a hat to protect the head and neck, avoiding sun exposure between 11am-3pm, and using a sunscreen that is broad spectrum and SPF15 or more (from WHO website, see references).

The use of sun beds is also advised to be stopped, as they increase the risk of developing melanomas by than 98% (Gorden et al., 2007). Early detection is very important as 95% of skin cancers can be treated successfully. Thus patients are also encouraged to check their own skin regularly and seek medical advice if lesions have changed size, shape, colour, or non-healing. Patients with moles are advised to use the 'ABCD' rule (BAD, 2010).

4. **Some self reflection: based on the experience gained during this elective, would I consider a career in Dermatology?**

Having attended hospital and community based clinics I Have had the opportunity to practice taking a dermatological history, and observed and practiced describing lesions that I previously found difficult. An attractive aspect of Dermatology is that it also involves minor surgery. I have attended biopsy clinics and was taught how to suture and given tips on how to get a 'good' scar (e.g. equal bites, avoiding steps etc). In addition, I have also seen inpatient cases (e.g. shingles). Thus this elective has given me the opportunity to observe a wide range of conditions in different settings, giving me good insight into what this branch of medicine entails. Having fully enjoyed my placement, I would definitely consider a career in Dermatology. Having discussed this with a consultant dermatologist and further reading, I am aware that the career path and will do my best as junior doctor to build a portfolio (audits, case reports, publications etc) to show my interest in such a fascinating branch of medicine.

I have also observed that GPs can also be more involved in dermatology by undertaking a diploma and becoming a GPSI (GP with specialist interest), which is what I would consider as a back-up career.

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