British Association of Dermatologists Elective Report
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I chose to study Dermatology during my Elective, as I am interested in pursuing this specialty in the future. I was attracted to Royal Prince Alfred Hospital, Sydney, as I have read about the World Famous research that it pioneers into treatment for malignant melanoma and other skin cancers.

By reflecting on my Intended Learning Outcomes, I hope to demonstrate how this enriching elective will influence my future practice.

1) To attend clinics and ward rounds in order to see the management of inpatients and outpatients.

During my four weeks I attended the following clinics; General Dermatological, Photodynamic Therapy, Transplant, Lymphoma and Biologics Clinics. I attended the biweekly Biopsy clinic, where having assisted excisions and punch biopsies I was able to perform two punch biopsies (including local anaesthetic and sutures) under supervision. At the biweekly Follow up clinic I enjoyed the continuity of care. I attended the Dermatology Department Journal Club, Dermatology lectures and Histopathology tutorials.

I shadowed the on call registrar seeing consultations and inpatients. Most patients are managed as outpatients. A patient's support network may influence their need to be admitted eg difficulty applying creams if living alone.

I attended clinics at the Melanoma Institute Australia (MIA), their ward round and had tutorials from them on Melanoma and Sentinel Lymph Node Biopsy (SLNB). I attended clinics at the Sydney Melanoma Diagnostics Centre.

At the Sydney Hospitals and Skin Cancer Foundation Australia Annual Clinical Dermatology Meeting, I participated in teaching about their most complicated cases.

2) **To gain further knowledge about malignant melanoma and how the Australian healthcare system copes with the increased prevalence.**

Australia has the highest rate of malignant melanoma worldwide. There is a 5% population risk of Melanoma in New South Wales. Due to this Royal Prince Albert Hospital also has the Melanoma Institute Australia and the Melanoma Diagnostic Centre (where there is full body mole scanning) and many GPs have a special interest in skin cancers.

Melanoma is managed aggressively at MIA; patients with a Breslow thickness >1mm, having Sentinel Lymph Node Biopsies and, if necessary, Lymph Node Clearance, PETCT and Brain CT.

I have learnt the importance of Breslow thickness, mitotic rate, perivascular and perineural invasion and ulceration for prognosis.

Melanoma patients have lifelong annual surveillance and often live with paranoia about self-checking. Annual bloods are done for Creatinine Kinase for tumour lysis and Vitamin D, as this is a poor prognostic factor.

Patients with metastatic disease may be started on Anti-PD1 drugs, which are available on the Pharmaceutical Benefits Scheme. There are multiple trials available eg for BRAF Inhibitors.

3) **To compare the range of dermatological conditions that present in Sydney, Australia compared to Glasgow, Scotland and hence reflect on the effects of sunlight on the skin.**

I saw a wide range of non-cancerous dermatological conditions including rare ones eg flagellate dermatitis from Shiitake Mushrooms.

The sun causes seasonal variation in presentations. Having visited in winter, I saw many patients with eczema due to the dry climate. I was surprised by the numerous cases of severe psoriasis. Many patients find their psoriasis improves in the summer and patients are often advised to sunbathe, in moderation. By contrast, patients find vitiligo is more obvious with a suntan. There are 25% fewer actinic keratosis presentations in the winter.

I expected to see more skin cancers but not such advanced cases, eg a patient with a 3x3x4cm BCC on their ear and another with a 1.5x1.5cm lip SCC. I was present when the doctor informed a 34-year-old mother that she had multiple liver and lung metastases from a melanoma.

Patient often had multiple skin cancers (eg one patient attended for 7 NMSC (non-melanoma skin cancers) biopsies). Many patients were referred to as "actinopaths" and cryotherapy was used in most clinics. Nicotinamide is being used to decrease the number of NMSC in patients with many NMSCs, because of research done at Sydney.

Aboriginal patients (Fitzpatrick IV) have low risk of melanoma but higher risk of vitiligo.

Glaswegians have the same skin type (Fitzpatrick I and II) to those I have seen with melanoma and NMSCs; reflecting the impact of total lifetime exposure and strength of UV exposure. Most patients I met with multiple NMSC had had outdoor jobs, whereas most with melanoma had worked indoors but described history of sunburn in childhood; fitting with the hypothesis that the sun damage leading to melanoma is done before the age of 15.

4) **To learn about the Public health campaigns regarding skin cancer in Australia.**

"Sun Sound" is a Cancer Council Skin Cancer prevention campaign. A jingle of 5 seconds is played every hour between 11am- and 3pm on loud speaker at almost 100 beaches and pools in NSW to remind teenagers to "slip, slop, slap, seek, slide".

Despite this, "Sun worshipping" appears to be prevalent nationally and many patients appeared to have a relaxed attitude to skin cancers. Eg I met a 24-year-old woman with a BCC who asked if she could sunbath for her wedding.

5) **To compare the healthcare system of Australia, a similarly developed country to the UK, with the NHS.**

There is the same Primary Healthcare System as in the UK. Dermatology Consultants typically spend one day a week, training Registrars, in Public Hospitals such as RPA. There are fewer Public Dermatologists, eg none in Canberra.

Medicare insurance provides Public Healthcare and also subsidises Private Healthcare. It was not clear the criteria for medicines being available on a Public or Private prescription and there were exceptions eg Aldara cream is subsidised for biopsy proven SCC.

6) **To appreciate how dermatological conditions can be indicative of underlying disease and systemic diseases.**

I saw many examples of this:
- Pruritic rash- (several primary or secondary causes)
- Spider naevi and palmar erythema from liver disease
- Systemic lupus erythematosus
- Uraemic syndrome (pruritus with excoriations but no primary lesions)
- Macular amyloid
- Diabetic foot ulcer
- Bullous diabeticorum
- H. Pylori/ parasitic infection causing skin rash

Several patients had multiple dermatological conditions eg a cardiology inpatient with lipodermatosclerosis, venous eczema, chronic lymphoedema, arterial ulceration, striae alba, acanthosis nigricans, acrochordons and tinea.

I have reflected that a holistic approach is fundamental to patient management.

7) **To gain a better understanding of the psychological aspects of dermatological conditions.**

Disorders of the skin can affect a patient psychologically and similarly patients with psychiatric illness can present with skin conditions.

I noticed how two patients reacted to their severe psoriasis: a blind patient was concerned by the roughness of her skin, whilst another sighted patient said the disease stopped her from wearing skirts. The psychological impact of a condition may influence the aggressiveness of the treatment.

Other examples I saw were:
- Psychotic pruritus
- Pityriasis rubra pilaris; it is not certain if the commonly coinciding mental health illness comes before or after
- Many patients with acne rosacea requested Brimonidine Tartrate due to embarrassment about the facial erythema
- A patient with vulval pyoderma gangrenosum's fear of odour kept her housebound

8) **To develop my Dermatology history taking and examination skills.**

I have learnt how to take a detailed history, examination, use a dermatoscope for pigmented lesions and use the correct Dermatological terms.

History	
1. Presenting Complaint	Specific questions about the lesion eg timing (onset and progression) (I noticed this was hard to obtain from an Aboriginal patient and I reflected on how they have a different perception of time) and changes, symptoms such as itch (often the first symptom of Melanoma) and pain, distribution. For skin cancers a painful lesion suggest squamous cell carcinomas or keratoacanthoma, itchy suggest basal cell carcinomas or squamous cell carcinoma or malignant melanoma, bleeding can indicate any type of skin cancer.
2. Past Medical History	Eg immunosuppressed (HIV or transplant patient) or previous skin cancers cut out.

3. Medications	Any new medications. For biopsy patients any fish oil or anticoagulants.
4. Any family history of Melanoma?	(For 2 and 4 I noticed patients often got confused and by listing the types of skin cancer this often resolved this).
5. Systems review	
6. Occupational history	Eg chemicals or working outdoors or recreational sun exposure and if they use sun protection.
7. Skin type	Work out and document the Fitzpatrick's skin type. Any history of sunburn as a child.
8. Psychosocial history	How does the disease affect the patient? Affecting sleep, work and other activities of daily living? Are they self-conscious? How aggressively does the patient want the condition treated? What is the patient's compliance like?

Examination	
1. Full skin check	Including eg nails; pitting, tinea, subungual melanoma.
2. Inspect the lesions distribution	This is significant for e.g. contact exposures, excoriations. It can help to determine if a condition is urgent eg mucous membrane involvement and determining seborrhoeic keratoses (often multiple) compared to melanoma (the lone “ugly duckling mole”).
3. Specifically for melanoma	Palpate for in-situ disease, lymphadenopathy and hepatosplenomegaly.

Dermatoscopy	
Condition	Dermatoscopy Appearance
1. Pigmented BCC	Crystalloid under Dermatoscopy when the light is turned.
2. Seborrhoeic keratoses	Has crypts and milia and hairpin like vessels.
3. Compound naevus	Is globular with milia.

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