The complexities of our outer layer

Abnormalities of the skin should be easy to manage... it is all laid out in front of us to observe, measure, touch, diagnose and treat. Cynics may say that most skin problems get better with time, topical corticosteroids and/or topical antifungal cream. The surgically minded may say... ‘if in doubt, cut it out’. Preventive health messages remind us to ‘slip, slop and slap’ to avoid the dangers of harmful ultraviolet (UV) radiation. But it is not always that simple.

Skin is a very complex organ covering a very complex organism. Skin forms an anatomical barrier protecting us from pathogens, trauma and dehydration; it is pivotal in heat regulation; its sensory nerve endings detect heat, cold, pressure, vibration, and tissue injury enabling us to interpret our environment; it synthesises vitamin D and absorbs substances from its surface (a property that we often use therapeutically). Importantly, our skin forms almost all of what others see of us, and so our skin plays a key role in how we are perceived and in our psychosocial wellbeing and function.

Skin problems can arise not only from disorders of skin itself but also from the effects of environment hazards (UV, pathogens, physical trauma), hormonal changes, connective tissue disorders and autoimmune effects, endocrine disorders, disease of other organs, effects of malignancy, as a side effect of treatments and drugs and from psychological causes. And all these problems that become apparent on our surface, whether they arise from the skin itself or as a reflection of a process occurring in our deeper layers, affect how we perceive ourselves, and how we are perceived by others.

For the doctor treating problems of the skin, the skills required include communication skills and an understanding of the patient, observation skills, understanding of the function of skin (both physiologically and psychologically), understanding of systemic disease, familiarity with the use of diagnostic tools such as the dermoscope, basic surgical techniques, therapeutics and pharmacology. It also involves the ability to balance pros and cons of advice and therapeutic interventions: minimising risk of skin cancers, while ensuring sufficient sun exposure to produce adequate vitamin D; ensuring adequate margins when a skin cancer is removed to minimise risk of recurrence and provide an acceptable cosmetic result; and balancing the risks of roaccutaine therapy against the short and long term risks of severe acne.

Fortunately, these are all skills for which our general practice training and experience equips us well. So this month in Australian Family Physician we are focussing on the trickier end of the dermatology spectrum. The articles in this issue are about ‘weird skin stuff’: skin cancers that don’t look or behave like we expect; skin conditions that are indicators of underlying systemic disease; and rashes that blister and may require much more complex assessment and treatment than simply a topical application of cream.

Steven Tomas discusses the management of infiltrative, micronodular and morphoeic BCCs in which margins are ill defined and texture and colour changes in the skin subtle. These lesions tend to be diagnosed late, and when they are, may be spread out with areas of apparently histologically normal tissue within their extended margins, making excision and assessment of clear margins difficult. Alex Chamberlain and Jonathan Ng describe the clinical and dermoscopic characteristics of atypical cutaneous melanomas and provide some very useful practical advice on lentigo maligna, and acral lentiginous, subungual, nodular, desmoplastic and hypomelanotic melanoma. They remind us to always consider melanoma as a diagnosis in changing red or pink lesions, scar like plaques without a history of trauma, warty, pigmented plaques changing over time and particularly in firm papules or nodules that are growing quickly. Belinda Welsh provides us with an overview of blistering skin disorders, with practical tips for assessment and a useful table on distinguishing clinical and histological features. She discusses conditions with weird names such as bullous impetigo, dermatitis herpetiformis, bullous pemphigoid and porphyria cutanea tarda in more detail.

In her article on skin and systemic disease, Adriene Lee discusses systemic diseases which have classic cutaneous findings as well as dermatological presentations in which we need to consider underlying disorders, such as generalised pruritis, erythema nodosum and skin presentations that can be an indicator of underlying malignancy. More weird names: acanthosis nigricans, necrobiotic xanthagranuloma and erythema gyratum repens. She writes, ‘the skin has the potential to provide a window into the patient’. This month we invite you to look through that window, in the hope that you will see something you have not seen before.

Jenni Parsons
MBBS, DRANZCOG, FRACGP, is Editor in Chief, Australian Family Physician, and a general practitioner, Gisborne, Victoria.