

affected body surface area (BSA). In multivariate analysis, subjects with eczema had lower spine BMD ( $-0.03 \text{ g/cm}^2$ ;  $p = 0.015$ ) and bone mineral apparent density (BMAD) ( $-0.01 \text{ g/cm}^3$ ;  $p = 0.008$ ) but higher hip BMD ( $+0.03 \text{ g/cm}^2$ ;  $p = 0.046$ ) and BMAD ( $+0.019 \text{ g/cm}^3$ ;  $p = 0.029$ ) compared to controls. Years of CS usage correlated with spine BMD ( $R = -0.35$ ;  $p = 0.02$ ) but not SCORAD, corticosteroid dose and BSA. In conclusion, severe eczema in children is associated with decreased spine bone mass most likely mediated through years of CS usage. The increase in hip bone mass is unexpected and may reflect increased physical activity or altered growth parameters.

### Rickets induced by atopic dermatitis

Lachlan Warren

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An 8 month old boy suffering atopic eczema with assumed dairy allergy had been treated with strict sun avoidance. He presented to hospital with seizures and hypocalcaemic tetany and a diagnosis of rickets was established. The implications of rickets and Vitamin D status in children and adults will be discussed, particularly with reference to recommendations of ultraviolet radiation avoidance.

### New treatments for atopic dermatitis

John Harper MD FCRP FRCPC

*Great Ormond Street Hospital for Children, London, UK*

Treating severe atopic dermatitis (AD) is often a challenge to physicians who look after such patients. Conventional treatment has focused on topical steroids and emollient therapy. More recently the topical calcineurin inhibitors, tacrolimus and pimecrolimus, have become available as new treatments for AD. At GOSH we participated in a number of studies for both of these medications and was involved in the discussions with NICE, the National Institute for Clinical Excellence, which produced guidelines for the use of these treatments in AD. More recently there have been some concerns expressed by the FDA in the States about the theoretical risk of malignancy. My talk will cover our basic treatment strategy, emphasizing that topical steroids remain first line treatment, the indications for using the topical calcineurin inhibitors and the importance of monitoring these patients. One aspect of management that is very relevant to Australia is the need to minimize sun exposure with these new treatments, and how this can be achieved.

For the small number of children with refractory AD, who fail to respond to topical treatments, systemic therapy may be necessary. Azathioprine has proved to be very effective. Our approach to treatment and results over the past 3 years will be presented and discussed.

### Avoiding new therapies in atopic dermatitis

Orchard David

*Department of Dermatology, Royal Children's Hospital, Melbourne, VIC*

Atopic dermatitis is an extremely common and complicated condition. Many new therapies designed to suppress the cutaneous immune system are now available or being developed. Although these therapies will undoubtedly improve the quality of life for some of those suffering with atopic dermatitis, the extra therapeutic options may distract the physician from the principal management element of addressing the underlying precipitants. Discussed are the various precipitants and in which patients they should be emphasized.

### Dermatology Gone Troppo

#### Cutaneous manifestations of North Queensland fevers

Robert Miller<sup>1</sup> and John McBride<sup>2</sup>

<sup>1</sup>*The Townsville Hospital,* <sup>2</sup>*Cairns Base Hospital*

North Queensland has a number of endemic infectious diseases. These include Melioidosis, Leptospirosis, Q Fever, Queensland Tick Typhus, Scrub Typhus, Dengue Fever and Mycobacterium ulcerans. The epidemiology, general clinical manifestations and specific dermatological manifestations will be discussed.

#### Dermatology in Papua New Guinea

Lachlan Warren

*Norwood, SA*

Medical practice and Dermatology in Papua New Guinea reflects that of the country's developing and topical world status. Infections of bacterial, fungal and arthropod aetiologies predominate, with leprosy prominent and HIV and yaws increasing in some regions. Treatment is limited by availability of health care workers and therapies. The challenges of assisting delivery of dermatology in this context will be presented.

#### Box jellyfish and skin damage: The result of venoms or other factors?

Jamie Seymour

*School of Tropical Biology, James Cook University, Cairns, QLD*

Envenoming of patients by box jellyfish is caused by the injection of venoms via nematocysts, specialised cell organelles, and may result in significant long term scarring. In other cases, scarring may be minimal, however regular disappearances and re-occurrences of the initial sting

marks may continue for up to 2–3 years. Box jellyfish venom has dermo necrotic components and it has often been thought that it is these factors which give rise to the scarring. However, treatment of skin damage due to envenomings from these animals using protocols similar for burn wounds appears to drastically reduce scarring, suggesting that secondary infections are the major cause of damage to the wound. Additionally, the nematocysts used for venom injection by these animals are left embedded in the skin of the victim, and this may play some role in the re-occurrence of injuries with time.

### Stings and burns in the rainforest

Phillip King

*Cairns Anaesthetic Group, 165 Lake St, Cairns, QLD*

This presentation will be opened with an introduction to tropical rainforests in North Queensland. This will be followed with an overview of the main plant families in which toxic skin reactions can occur. A visual presentation of some of the important toxic plants from each group will be shown. With this there will be a description of the known reactions together with a brief description of the toxic substances responsible for these reactions.

### Tropical mycoses: Treatment options for chromoblastomycosis

Linda Martin,<sup>1</sup> R. Lawrence<sup>2,5</sup> and D.F. Murrell<sup>1,5</sup>

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### Case Presentation

A 54 year old man presented with an acute bacterial infection of chronic asymptomatic bilateral leg lesions. He had a background of diabetes mellitus and had worked as a labourer in rural Tonga before moving to Australia thirty years ago. On examination there were 8cm scaly hypopigmented plaques with ulcerated areas on the lateral ankle of both legs. Histopathology of punch biopsies revealed pigmented fungal spores of chromoblastomycosis, however fungal culture was negative. His febrile symptoms resolved with a course of antibiotics and anti-fungal therapy with itraconazole 100mg bd was initiated.

### Chromoblastomycosis

Chromoblastomycosis is a chronic subcutaneous fungal infection caused by a number of different species of dematiaceous fungi and is acquired in tropical rural areas from soil exposure. The disease is characterised by asymptomatic verrucous plaques on extremities which may continue to expand over decades and are commonly complicated by secondary bacterial infection and lymphoedema.

### Treatment Options

Treatment of chromoblastomycosis is often unsatisfactory and there is no consensus regarding optimal treatment. Paucity of trial data has resulted in treatment recommendations based on observational evidence of varying quality.

Current evidence for the efficacy of systemic anti-fungal therapies and recommended regimens is reviewed. The role of adjuvant and combination therapy is discussed.

Emerging data on in-vitro anti-fungal susceptibility testing has shown promising clinical utility. Considerable variation in susceptibility among causative agents of chromoblastomycosis has been demonstrated, which illustrates the potential value of organism identification and directed therapy in invasive fungal infections.

### The skin as canvas: The role of body painting in the essence of Australian Aboriginals

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Humans migrated to Australia in the Pleistocene (circa 50,000 years ago). Discrete groups of hunter-gatherers entered Australia from the north via land bridges and island hopping from somewhere in Asia. Sea levels were lower than today. These indigenes were of low technology. As colonists, they evolved into a steady state of ecologic harmony. They covered the whole continent.

There is no written record of prehistoric aboriginal Australia. There remains archeological evidence and importantly, aboriginal oral tradition passed on from generation to generation.

These Aboriginals indulged in multiple ceremonial acts often with painted bodies. They created and passed on stylized communications with stories especially about Dreamtime. To sing was to dance was to paint! Body painting had a cultural and social significance.

Dreamtime or Dreaming is a powerful alive, religious force for Aboriginals and a spiritual one. It embraces the structure of society, the rules of behaviour and the ceremonies performed in order to maintain the life of the land. It describes the time when earth, humans and animals were created. It governs how one should live.

We emphasize that body painting carries deep religious significance for Aboriginals. The act of painting has a strict spiritual convention although individual creative effort plays a role. Designs are elaborate and geometric. They can reflect totems (any natural species of plant or animal, any part of weather, any topographic feature, any part of the body and any instinct or emotion, say libido, happiness or