AUSTRALASIAN COLLEGE OF DERMATOLOGISTS

Abstracts presented at the
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Dermoscopy
K. Crotty
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Multiple cases using dermoscopy are presented for diagnosis. Dermoscopy can assist in the diagnosis of non-melanocytic pigmented lesions including basal cell carcinoma, seborrheic keratosis, hemangioma and lichen planus-like keratosis. A useful approach for dermoscopic diagnosis of pigmented lesions is to decide if the lesion is melanocytic or non-melanocytic. Features seen in melanocytic lesions include a pigment network, brown or gray-black globules, streaks (pseudopods/radial streaming), homogenous blue pigmentation, and a parallel pattern (acral lesions). If melanocytic, the diagnostic decision is whether the lesion is benign, malignant or suspicious. Multiple algorithms have been developed to assist in this differentiation.

Nail disorders
A. Howard
Melbourne, Victoria

Not all nail disease is caused by fungal infection. How confident are you about your diagnosis and management of Nail problems? This quiz will take you through some common and uncommon problems encountered in dermatology practice. It is expected that all practicing dermatologists will score 100% and feel more confident in themselves.

Healthy Scepticism
P. R. Mansfield

In 1845 many doctors felt offended when it was first suggested that we should wash our hands before surgery to avoid invisible unintended harm. We are now going through a similar paradigm shift regarding the suggestion that we should be more sceptical about drug promotion. Healthy Skepticism Inc is an international non-profit organisation. Our main aim is to improve health by reducing harm from misleading drug promotion. Our philosophy
involves selectively resisting claims that are not justified by good evidence or argument, while accepting those that are.

Rather than on blaming individuals, or companies the Healthy Skepticism reform agenda is based on understanding that inappropriate marketing and inappropriate treatment decision making results from system problems. When drug companies produce misleading promotion they are rewarded by doctors prescribing more drugs. When doctors over prescribe that gives companies more money to spend on “education”, research funding, samples, visits from attractive ego-boosting sales staff, branded stationary, equipment and toys. This can occur with both doctors and drug companies genuinely believing that they are doing their best for patients as result of groupthink. This vicious cycle of ‘bad’ promotion and ‘bad’ decision making can be compounded by deliberate unethical behaviour. However unintended bias is more common and thus causes more harm.

The Healthy Skepticism reform agenda includes three main components:
• Improve regulation of drug promotion
• Improve health care decision making
• Redesign the incentive systems for all involved in drug use.

The most important reforms are:
• Education to address the key factor that makes people vulnerable to being mislead: overconfidence.
• Replacing patent monopoly protection with competitive grant funding for research, education and health promotion.

Practice Management Session

Superannuation, tax and investment
T Bates
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Superannuation is mutating in July 2007. Ignoring super will not make it go away. Scrape below the skin and you will find a highly contagious condition, in a new environment which will cause it to spread extremely quickly. Australia leads the world in infection rates and as we age it will increasingly dominate our lives, as well as the lives of our children, our grandchildren and the generations that follow.

Tony will talk about learning to live with superannuation post 2007 – it’s not as interesting as tinea nor as troublesome as eczema but it’s less painful and easier to manage than you think.
Nicotinamide protects against ultraviolet-induced immunosuppression in humans

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Skin cancer continues to be the most common form of cancer in Australia and the overall incidence is increasing. Ultraviolet (UV) radiation is known to cause immunosuppression in humans, which contributes to skin carcinogenesis. Improving the immune protection of skin might therefore reduce the incidence of skin cancer. Murine studies have shown nicotinamide has immune-protective and cancer-preventive effects against UV radiation. To study the immune effects of nicotinamide in humans, the Mantoux response was used as a model for skin immunity. In a randomised, double-blinded cross-over study the protective effects of oral nicotinamide was compared to placebo. Healthy Mantoux-positive volunteers (n = 30) were randomly allocated to take either one nicotinamide (500 mg) or one placebo tablet 3 times daily for 7 days. During this period one side of the lower back was irradiated with fixed low doses of solar-simulated UV over 3 consecutive days. An adjacent unirradiated site acted as an immunologic control. Following the last day of irradiation, Mantoux testing was performed on each test site and measured 72 hours later. Immunosuppression was determined as the difference in the Mantoux-induced erythema of the irradiated test site compared to the unirradiated control. Following a 4-week washout period, the experiment was repeated on the opposite side of the back whilst the volunteer took the opposite tablet. Significant UV-induced immunosuppression occurred in the presence of placebo in a UV dose-dependent manner (p < 0.001). Oral nicotinamide significantly prevented this immunosuppression for each dose of UV (p < 0.001). Nicotinamide is safe and inexpensive and looks promising as a chemopreventive agent for skin cancer.

Evaluation and treatment of mycosis fungoides (MF) and Sézary syndrome (SS)

E.A. Olsen for the International Society for Cutaneous Lymphomas (ISCL)
Professor of Medicine, Divisions of Dermatology and Oncology, Duke University Medical Center, Durham, NC, USA

The ISCL, in conjunction with the Cutaneous Lymphoma Task Force of the European Organization of Research and Treatment of Cancer (EORTC), has recently developed revisions to the 1979 Mycosis Fungoides Cooperative Group
Staging and Classification of CTCL. These revisions were made to incorporate advances related to tumor cell biology and diagnostic techniques as pertains to MF and SS; to clarify certain variables that impede either effective communication between investigators and/or the development of standardized clinical trials; and to provide a platform for tracking other variables of potential prognostic significance. Moreover, these revisions pertain specifically to MF and SS as it is now clear that non-MF/non-SS subtypes of CTCL do not share the same prognosis or clinical characteristics. The recommended evaluation of patients with MF/SS mirrors this revised staging and classification and incorporates the minimal requirements for the diagnosis of MF/SS as set forth by the ISCL algorithm for early disease. The ISCL has also agreed on a standard approach to the treatment of early MF which importantly relies on immunomodulation vs chemotherapy. Treatment of late stage (Stage ≥IIB) or more aggressive MF/SS (folliculotropic MF/large cell transformation) is evolving as new treatments are introduced and combination therapy shows enhanced efficacy over single agent therapy.

References

My Best Articles for 2006

General dermatology
A.J. Chamberlain
Department of Dermatology, The Alfred Hospital, Prahran, Victoria

An update of recent highlights from the general dermatology literature will be presented. The presentation will primarily focus on those advances that influence day to day dermatology practice and will include novel therapies and new insights into disease pathogenesis.

Surgical dermatology
C. Vinciullo
Royal Perth Hospital, Perth, Western Australia

Laser-mediated hair removal does not appear to work by frank destruction of follicular stem cells. Other mechanisms including functional alteration of these cells may underlie the clinical efficacy of the procedure.


Hair removal with commonly used systems is highly effective. No statistically significant difference in efficacy was seen between four different light devices (810 nm diode laser, 755 nm alexandrite laser, IPL with red filter, IPL with yellow filter) after two treatments.


A reassuring lack of complications is seen with electrosurgery in patients with these devices implanted. Safety can be optimized by adherence to published recommendations on precautions and techniques in this setting. Implantable cardiac defibrillators require special attention.


The safety of conventional monopolar electrosurgery in patients with cochlear implants remains unproven. Bipolar electrosurgery is the current recommendation for these patients. This study in a cadaveric pig model suggests that judicious use of monopolar or Coblation electrosurgery in adenoidectomy does not convey a serious risk to cochlear implant integrity.


Hand held battery powered thermocautery units operate at temperatures exceeding 1400°C. The use of a thermocautery unit that allows temperature adjustment demonstrates optimal haemostasis at approximately 100–400°C, which is well below the temperature of most currently used portable thermocautery units.


The nasal dorsum, supra-tip and tip are common sites for non-melanoma skin cancer. After elliptical excision the skin edges can be sometimes difficult to appose particularly
at the central widest point. The use of a Burow’s graft provides a simple and reliable solution.

Contact dermatitis
R.L. Nixon
Occupational Dermatology Research and Education Centre, Skin and Cancer Foundation, Carlton, Victoria

Formaldehyde was identified in the flocked textile lining of reusable protective polyvinyl chloride (PVC) gloves, at a concentration comparable to that emitted by a layer of moisturising cream preserved with a formaldehyde releaser. It was also identified from nitrile and latex gloves which had similar linings. (Ponten, Contact Dermatitis 54:268–271)

In a case series, all patients (17) who reacted to sesquiterpenelactone mix, reacted to preparations of herbal teas, including chamomile, wormwood and dandelion. There have been reports of suggesting that systemic contact dermatitis may occur with ingestion of such teas. (Lundh et al. Contact Dermatitis 2006; 54:196–201)

Everything you wanted to know about spectacle frame allergy, including a patch test series. (Walsh et al. Contact Dermatitis 55:150–159)

Immediate reactions to chlorhexidine do occur and can be assessed with prick testing. (Aalto-Korte et al. Contact Dermatitis 55:175–177)

The most common cause of dermatitis affecting the eyelids is allergic contact dermatitis (45.8%). (Amin et al. Contact Dermatitis 55:280–285)

Systemic nickel dermatitis after oral exposure to nickel may be important in approximately 1% nickel-sensitive patients. (Jensen et al. Contact Dermatitis 54:79–86)

White petrolatum is virtually non-sensitising: German data on 80,000 patients tested between 1992 and 2004. (Schnuch et al. Contact Dermatitis 54:338–343)

Patch test sensitisation is rare: 26 late reactions in 7619 patients. (Jensen et al. Contact Dermatitis 55:30–35)

Both mercapto mix and mercaptobenzothiazole should be on the standard series. (Diepgen et al. Contact Dermatitis 55:36–38)

Don’t cut it out! Nickel allergy mimicking BCC. (Hague. Contact Dermatitis 54:344–345)
Cutaneous clues to the diagnosis of leprosy: A 30 year review of presentations to the Dermatology Department at Waikato Hospital, Hamilton, New Zealand

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In 2005 the World Health Organisation (WHO) statistics show there were three new cases of leprosy reported in New Zealand and five in Australia.

We review five patients diagnosed with leprosy by the Dermatology Department, Waikato Hospital since 1976. All 5 patients had immigrated to New Zealand within the preceding five years from India, the Cook Islands or Samoa. The patients' ages ranged from 19 to 29 years; four were male. All were diagnosed with multibacillary disease; the clinical spectrum ranged from lepromatous to tuberculoid leprosy. The first patient in 1976 received dapsone monotherapy; three patients completed different regimens of multidrug therapy, and one patient was lost to follow up before treatment could commence.

Important cutaneous clues in diagnosing leprosy include hypopigmented or erythematous macules which may or may not be hypoesthetic and thickened peripheral nerves. The current understanding of leprosy immuno-pathology and treatment will be reviewed.

Big legs! Could it be lipoedema?

A.G. Ming1,2, M.J. Whitfield1,2

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2 Skin & Cancer Foundation Australia, Darlinghurst, New South Wales

Lipoedema is a common diagnosis which is under-recognised in the dermatology community.

We present a case of a 72-year-old woman with abnormal fat distribution in her lower limbs, hips and upper arms, bilaterally, with marked sparing of her torso, face and feet. This has been present since adolescence and has been unaffected by standard weight-loss strategies. There is a family history of a similar fat distribution. Her clinical presentation is consistent with a diagnosis of lipoedema.

Lipoedema predominantly affects the buttocks and lower limbs of women but characteristically spares the feet. Notably, there is an absence of centripetal obesity. It is always bilateral and pitting oedema, if present, is minimal. This condition is a result of abnormal accumulation of fat and fluid in the subcutaneous tissue. The onset of
lipoedema typically occurs during adolescence and a positive family history is common.

These patients are often diagnosed with obesity, lymphoedema or chronic venous stasis, but are unresponsive to specific therapies for these disorders. Differences between these disorders can be made on clinical grounds. Lymphoedema is typically unilateral, involves the feet, demonstrates marked pitting oedema and responds to leg elevation. Chronic venous stasis involves the feet, can elicit pitting oedema and is not uncommonly associated with ulceration. The cosmetic issue of lipoedema is a difficult management problem as therapeutic options are limited.

Reference

Comparison of inpatient bed rest and home convalescence following split thickness skin grafting to the lower leg
B.G. Tallon, G.F. Oliver
Department of Dermatology, Greenlane Hospital, Auckland, New Zealand

Aim: To determine if discharge home following STSG to the lower leg compromised graft results or morbidity compared to admission to hospital.

Method: Cases were reviewed retrospectively from the Auckland Dermatology department’s surgical records. All STSG to the lower legs were included. All clinical notes were reviewed and phone calls made to patients and relatives.

Results: A total of 61 cases were included, 51 admitted as inpatients, 50 discharged home. There was no significant difference between the two groups’ age, sex or co-morbidities. A trend was seen in inpatients towards increased infection ($p = 0.19$) and venous thrombosis ($p = 0.34$), although no significant difference was detected in any measured outcomes.

Conclusion: These results suggest that home convalescence after split thickness skin grafting to the lower legs compares favourably with inpatient care. There is a lack of significant difference between admitted and discharged patients in all outcomes including bleeding, number of dressing clinic follow ups and graft loss, while there is a suggestion of increased venous thrombosis and graft infection risk for those admitted to hospital.
Prevalence of contact sensitivity in patients presenting with pruritus vulvae: An observational study

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G. Marshman³, J. Wood¹
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During the last two years, an observational study has been undertaken to determine the prevalence of contact sensitivity in women presenting with the symptom of vulval pruritus. This has been conducted in three main centres and has been one of the first prospective studies to seek this information. A principal aim was to delineate the role of patch testing in this setting. A summary of the data and conclusions of this study will be presented.

An important cutaneous complication of renal transplantation

K. Armour, J. Scarisbrick, C.M. Stefanato, E. Calonje, D. McGibbon
St John’s Institute of Dermatology, Guys’ and St Thomas’ Hospitals, London, UK

Case history: A 59 year old male presented with a 5 month history of several rapidly growing non-tender lesions on his left lower leg. He had undergone a renal transplant in 1990 for which he was immunosuppressed.

Clinical examination: Examination revealed a violaceous, friable, and crusted tumour on the left pretibial area. Also noted were 5 non-tender, subcutaneous nodules scattered over the left posterior calf.

Investigations: A skin biopsy was negative on culture.

Histopathological examination showed a dense dermal proliferation of monomorphic atypical plasma cells. The lesional cells were negative for CD20, CD79a and CD3, and positive for CD45 (LCA), MIB1 (80%) and CD138. These findings are consistent with a diffuse large B-cell lymphoma, plasmablastic variant. PCR for EBV was positive.

Extensive staging investigations were all negative, indicating a primary cutaneous aetiology for the patient's plasmablastic lymphoma.
Progress: The patient was initially treated with local radiotherapy. The response to this was short-lived. His immunosuppression has been decreased and the patient is receiving systemic chemotherapy.

Discussion: Plasmablastic lymphoma (PBL) is an aggressive, rare variant of diffuse large B-cell lymphoma. PBL mainly affects HIV-positive individuals. PBL has a strong affinity for the oral cavity, but has also been reported in extraoral sites. We believe our case to be the ninth reported in which plasmablastic lymphoma has presented at a cutaneous site in an HIV negative patient in a post-transplant setting.

Reference

An evaluation of the treatment of non-melanoma skin cancers by surgical excision at a dermatology practice
V. Pua
Royal Adelaide Hospital, Adelaide, South Australia

Non-melanoma skin cancers (NMSC) are the most common malignancy in Australia. They are also the most expensive to treat: in 2000–2001, NMSC cost approximately $264 million. While the excision of NMSC is a common modality of treatment by both specialists, such as dermatologists, and general practitioners, there is a paucity of published literature evaluating its efficacy in Australia. This study profiled the NMSC excised in a Dermatology practice over a period of 12 months. It examined the rate of incomplete excisions which is compared to data from practitioners such as plastic and general surgeons. The treatment of incompletely excised lesions and recurrence rates was also evaluated. By benchmarking our clinical practice with guidelines and other studies in the current literature, we aim to improve the quality of care in the treatment of NMSC.

Reference

A case of indeterminate cell histiocytosis
J. Cahill1, K. Hollowood2, R. Turner1
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2John Radcliffe Hospital, Oxford, UK

A 72-year-old man presented with a six-month history of skin lesions on his face and neck. He reported a history of myelodysplasia, which had been diagnosed on a bone marrow biopsy in 2002, although he had never required treatment for this condition.
On examination he had 5 reddish-brown nodules on the face and neck. There was no lymphadenopathy. He had a tumour with a similar appearance to those on his face obstructing his left external auditory canal, causing marked conductive deafness in that ear.

Histology of the largest forehead nodule showed a dermal tumour with sheets of large eosinophilic cells, some of which possessed vesicular nuclei. Immunohistochemistry demonstrated that the tumour cells showed strong diffuse expression of S100 and 50% also expressed CD1a. Electron microscopy did not demonstrate any Birbeck granules.

A CT scan showed two small nodules in the lungs and almost complete obstruction of the left external auditory meatus by soft tissue, with no associated bony destruction. Repeat bone marrow biopsy showed evidence of myelodysplasia, with no evidence of progression from his previous biopsy.

Indeterminate cell histiocytosis (ICH) has been reported as a rare condition in which the proliferating cells resemble the cells of Langerhans' cell histiocytosis, but lack Birbeck granules. There is ongoing debate as to whether ICH is a distinct entity, and if so, if it is more closely related to LCH or other forms of histiocytosis. ICH has been described as having a fairly benign course; however there have been some associations with haematological malignancy.

All in a day's work – Systemic histoplasmosis and cryptococcosis
M. Whitfield, R. Cocciolone
Department of Dermatology, St Vincent's Hospital, Sydney, New South Wales

Two consult requests late in the same day, and subsequent twilight biopsies, yielded the following series of interesting cases.

The first was a case of disseminated histoplasmosis in a 59-year-old, HIV positive, woman who presented with worsening malaise, fever and several distinctive facial lesions. There was good correlation between the clinical, microbiological and histopathological findings. Unfortunately, despite early diagnosis and treatment, she deteriorated rapidly and later died in intensive care.

The second was a case of systemic cryptococcosis in a 65-year-old man with a background of HIV and lower limb Kaposi's sarcoma who presented with fever, malaise and an irregularly shaped, 7.0 cm ulcer amidst widespread post-treatment skin changes on his proximal right leg. Again there was good correlation between the clinical, microbiological and histopathological findings. A slow, but positive clinical outcome was obtained post treatment.

We believe these cases highlight the importance of a multidisciplinary approach when managing complex patients
who develop novel skin signs. Early dermatological referral when these skin changes first become apparent, followed by the appropriate diagnostic techniques, often facilitates earlier diagnosis and subsequent management, especially when dealing with fastidious or slow growing organisms.

Complications associated with recessive dystrophic epidermolysis bullosa
J. Fisher, O. Wargon

Department of Dermatology, Prince of Wales Hospital and Sydney Children’s Hospital, Randwick, New South Wales

Recessive dystrophic epidermolysis bullosa is an autosomal recessive inherited scarring mechanobullous disease. The extensive subepidermal blistering results in significant disabling and life-threatening sequelae. Four cases of recessive dystrophic epidermolysis bullosa from the Epidermolysis Bullosa Clinic at the Sydney Children’s Hospital will be presented. The associated complications will be discussed, including squamous cell carcinoma, webbing and pigmentation, outlining the importance of early recognition, treatment and monitoring, along with multidisciplinary team management.

Primary systemic amyloidosis: A classic presentation of this rare condition
C. Grills¹, F. Wojnarowska¹, V. Venning¹, E. Soilleux¹, A. Wale²
¹Churchill Hospital, Oxford, UK
²Horton Hospital, Banbury, Oxfordshire, UK

A 65 year gentleman with known chronic lymphocytic leukemia, presented with a two month history of haemorrhagic blisters in the mouth, significant weight loss and general malaise.

Examination showed striking petechiae and ecchymoses, which were predominantly in a flexural distribution and in the periocular region.

Following a normal coagulation screen, further tests were requested which revealed an Ig G Lambda paraprotein of 1083. Skin biopsy showed hyaline material in the vessel wall along with superficial dermal haemorrhage. Congo red staining under polarised light confirmed the presence of vascular and interstitial amyloid and a diagnosis of primary systemic amyloidosis was made.

The patient was commenced on the chemotherapy regime of melphalan 10 mg together with prednisolone 50 mg daily for 4 days per month. Sadly, however he deteriorated quickly and passed away two months later.
Amyloidosis is a generic term, for the extracellular deposition of a proteinaceous substance composed of one of a family of biochemically unrelated proteins. Amyloid deposits, regardless of the clinicopathologic type or tissue involved, are shown by X-ray crystallography to have a cross-B-pleated sheet configuration, and a distinctive fibrillar ultrastructure. This is demonstrated by green birefringence on Congo red staining.

Primary systemic amyloidosis appears to be a consequence of plasma cell dyscrasias. The fibrils are composed of protein AL, which consists of intact or fragments of immunoglobulin polypeptide light chains, and is usually associated with a similar abnormal immunoglobulin light chain in the serum, commonly of the lambda class, such as was demonstrated by our patient.

Primary systemic amyloidosis appears to be a consequence of plasma cell dyscrasias. The fibrils are composed of protein AL, which consists of intact or fragments of immunoglobulin polypeptide light chains, and is usually associated with a similar abnormal immunoglobulin light chain in the serum, commonly of the lambda class, such as was demonstrated by our patient.

Our patient illustrates many of the clinical features of primary systemic amyloidosis; he was 65 years old and presented with the non-specific symptoms of fatigue, weight loss, oedema and dyspnoea. Clinically evident cutaneous involvement occurs in 29–40% cases Petechiae, purpura, and ecchymoses occurring spontaneously or after minor trauma are the commonest skin signs and are the result of amyloid infiltration of blood vessel walls.

Renal involvement may be present and proteinuria, hypoalbuminaemia and oedema was evident in our patient. Other clinical features will be determined by the various organs involved.

Most patients receive a trial of chemotherapy with melphalan and prednisolone as our patient did. Autologous bone marrow transplantation may be offered in some cases and supportive measures are administered according to the organs affected.

This case with its clinical photographs and histopathology slides illustrates many of the classical features of the rare condition of primary systemic amyloidosis.

| Cosmetic Seminar |

**Principles and practice of cosmetic ophthalmology**

J. Carruthers  
*Fellow American Society of Ophthalmic Plastic and Reconstructive Surgery, Diplomate American Boards Cosmetic Surgery, Clinical Professor, Department of Ophthalmology, University of British Columbia, Canada*

**Introduction:** Cosmetic ophthalmology has rapidly expanded in its scope to include other surgical and noninvasive approaches to aesthetic facial rejuvenation.

**Method:** A brief overview of the commonest procedures in cosmetic ophthalmology: aesthetic blepharoplasty and
brow lift, cosmetic BOTOX, cosmetic fillers, laser resurfacing, radiofrequency and intense pulsed light treatments, liposuction and fat transfer and often combinations of the above procedures are now mainstream.

**Results:** Cosmetic oculofacial procedures can now be taught in postgraduate Fellowship programs to further enhance the aesthetic results in this group of subjects. In addition considerable research is now published in the peer reviewed literature. Close collaboration with cosmetic dermatology, facial plastic surgery and aesthetic plastic surgery has also become a strong feature of this group.

**References**

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**Nonablative, immediate skin tightening using a novel infrared device: A report of 25 patients**

J. Ruiz-Esparza

*University of California, San Diego, California, USA*

**Introduction:** Nonablative radiofrequency (NARF) has been demonstrated for producing noninvasive skin tightening. However, pain and complications due to overtreatment effects associated with the RF technology are an important downside to this technology. A new nonablative medical device utilizing a broadband infrared filtered light, Titan (Cutera, Inc., Brisbane, CA, USA), has been tested as a less painful, more consistent alternative.

**Method:** Twenty-five patients were treated. Standardized photographs were obtained preoperatively, after a few days, a few weeks, and up to 12 months after the procedure.

**Results:** Immediate changes were obtained in 22 of 25 patients. Examination of photographs revealed that the initial improvement was maintained throughout the follow-up period.

**Conclusion:** Immediate true skin tightening persisting through the immediate, intermediate, and long-term follow-up was found in the vast majority of patients in this group. Edema as an artifact simulating immediate improvement was excluded by serial photographs taken during the
follow-up period. Skin contraction occurred at low fluences, below the threshold of pain.

Reference

Infectious Diseases Symposium

Skin and soft tissue infections complicating marine and estuarine inoculation injuries: Case series and review
R.R. Miller
Townsville Hospital, Townsville, Queensland

A case series of several skin and soft tissue infections complicating marine and estuarine inoculation injuries is presented. The cases were all patients admitted to hospital in Cairns and Townsville between 2000 and 2006. The epidemiology and microbiology of the series is reviewed. The literature on the subject is reviewed and recommendations on empiric treatment presented.

Cutaneous leishmaniasis and therapy
J. Wayte
Adelaide, South Australia

Cutaneous leishmaniasis is endemic in many parts of the world with an annual incidence estimated at 1.5 million cases. It does not occur in Australia but is common in recently arrived immigrants, particularly those from Afghanistan and Pakistan.

Diagnosis is straightforward if the disease is suspected but there is no simple and effective therapy. Spontaneous healing is usual but may be prolonged and result in disfiguring scars.

The focus of discussion will be Old World cutaneous leishmaniasis and a variety of therapeutic options will be reviewed.

What happens to your skin if your immune system improves too fast? The new problem with antiviral treatment for HIV infection
M.J. Whitfeld
Skin and Cancer Foundation and St Vincent’s Hospital
Darlinghurst, Sydney, New South Wales

The cutaneous manifestations of HIV are ever changing. The most recent major change has been the recognition of
a syndrome known as the immune reconstitution syndrome, or immune restoration syndrome. This is a condition in which, a number of diseases can worsen after the commencement of effective antiretroviral therapy for HIV infection. This can be an infectious disease such as molluscum contagiosum, human papillomavirus infection, herpes and varicella zoster infections, and mycobacterial infections including leprosy. It can also occur with inflammatory conditions such as psoriasis, seborrheic dermatitis, and autoimmune diseases such as lupus, vitiligo, and alopecia areata. Kaposi’s sarcoma, sarcoidosis, and eosinophilic folliculitis can also occur for the first time or recur.

The significant risk of reactivation of latent tuberculosis or worsening of tuberculosis with the TNF-α inhibitors has triggered the need for our specialty to re-examine its approach to tuberculosis screening. We also need to be able to assess the adequacy of its previous treatment in regard to our therapeutic agents and our patients.

Tuberculosis reactivation is a risk with any immunosuppressive therapy but particularly with infliximab, adalimumab and etanercept. We have observed much variation in the practice of our Australian colleagues in specialties more familiar with tuberculosis screening and management.

We will discuss screening and treatment issues including history, CXR, Mantoux and Qantiferon gold-TB®.

4 case scenario’s illustrating the issues faced in Australian dermatology practice were sent to 4 infectious diseases, 4 respiratory and 4 rheumatology physicians along with our panel. Suggested approaches to their management will be presented and critically discussed after we quiz the audience on the same series of questions.

The symposium’s aim is to lay foundations for the establishment of a guide to assist Australian dermatologists face this old but re-emerging challenge.
Myocutaneous flaps
M.J. Hunt
Sydney, New South Wales

Myocutaneous flaps based on the transverse nasalis muscle are a useful repair option for defects of the nasal tip and supratip. They have the advantages of maintaining normal nasal tip contour, having a reliable vascular supply and achieving excellent cosmetic results. Steps in planning and execution of this flap will be described and demonstrated in a short video presentation. A number of case examples will also be shown and variants of the flap discussed.

Rothmund–Thomson syndrome complicated by peripheral gangrene
A. Halbert
Princess Margaret Hospital for Children, Perth, Western Australia

Rothmund–Thomson syndrome (RTS) is an autosomal recessive genodermatosis characterized by poikiloderma, pre and post natal growth retardation and a range of skeletal and ocular abnormalities. In this case report, to be presented at the Paediatric Dermatology Breakfast Meeting, an infant with the rare combination of RTS and trilinear myelodysplasia will be presented. At 14 months of age this girl developed oedema and blistering of the hands and feet, other characteristics of the complete syndrome: alopecia, follicular ichthyosis, photophobia, nail dystrophy and psoriasisiform plaques on extensor surfaces. He was seen by many specialists and had always been assumed to have an ectodermal dysplasia rather than a disorder of keratinisation until he developed follicular ichthyosis in late childhood. He is currently being treated with acitretin. This case illustrates the difficulty of diagnosing rare syndromes. Currently there are four generations of this family living with 5 known affected individuals. Blood from over 20 family members is being analysed in an attempt to find the genetic defect.
with progressive ischaemia of the hands, forearms, lower legs and feet. This progressed to gangrene and eventually both hands and both feet had to be amputated. Despite extensive investigations by a multidisciplinary team, no cause for the peripheral gangrene could be found. I present this rare clinical scenario to promote discussion about the potential complications of RTS and to determine if this devastating complication has been seen elsewhere in Australia.

Erythroderma 18 months post bone marrow transplant: Differential diagnosis and management
O. Wargon
Sydney, New South Wales

A case presentation of a six year old boy who presented to dermatology with exfoliative erythroderma 18 months post bone marrow transplantation.

He had a past history of biopsy proven cutaneous acute graft versus host disease. The provisional diagnosis of chronic graft versus host disease and the differential diagnosis (including donor lymphocyte considerations) will be discussed. Management issues will be discussed including drug interactions and complications.

References
A case of recessive epidermolysis bullosa simplex due to homozygous KRT14-Y204X mutation with keratin 6 and 16 expression

L.K. Martin¹, E. Yiasemides¹, N. Trisnowati¹,2, J. Su³, N. Dang¹, S. Klingberg³, P. Marr², C.W. Chow³, D. Orchard³, G. Varigos³, D.F. Murrell¹,6
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⁶The University of New South Wales, Sydney, New South Wales

Case report: A female child of consanguineous parentage was noted at birth to have aplasia cutis affecting the palms and soles. Now aged eight, she has an unusual phenotype with scattered blisters, mucosal involvement, palmoplantar hyperkeratosis, hyperkeratotic nails, pruritus, epidermolysis bullosa (EB) naevi and atrophic scarring. In addition she has iron deficiency anaemia, and failure to thrive.

Electron microscopy demonstrated blistering in basal layer consistent with epidermolysis bullosa simplex (EBS). Keratin tonofilaments were absent in the basal layer, however normal keratin filaments were observed in the stratum spinosum and above.

Immunofluorescence mapping was negative for K14, and unusually was positive for K6 and 16. Mutation screening identified a homozygous truncation mutation, KRT14-Y204X.

Discussion: EBS is the most common variant of EB, and is usually inherited as an autosomal dominant trait due to mutations in either KRT5 or KRT14. Recessive EBS is rare, with only 14 genetically confirmed cases reported in the literature. This is the first known case of recessive EBS in Australia.

Keratins are obligate heterodimers and K5 and K14 interact to form the intermediate filament cytoskeleton, which is essential for maintaining the integrity of the basal epidermis. The KRT14-Y204X mutation is predicted to destabilise mRNA, resulting in nonsense-mediated decay of K14.

It is interesting that keratin 6 and 16 were expressed in the epidermis, as these proteins are generally only positive in hyperproliferative disorders. It has been proposed that these keratins compensate for the loss of K14, and thus modulate disease phenotype.
Differential expression of pyloric atresia in junctional epidermolysis bullosa with novel ITGB4 mutations
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8University of NSW, Sydney, New South Wales

Introduction: Junctional epidermolysis bullosa with pyloric atresia is an autosomal recessive blistering disease including lethal and nonlethal variants due to mutations in ITGB4 and ITGA6.

Method: Skin biopsies from patients were processed for IF mapping and when staining for integrin beta 4 or alpha 6 were absent or reduced, ITGB4 was screened for mutations. A review of known mutations of ITGB4 and the phenotypes of the patients with JEB-PA was undertaken.

Results: 3 novel ITGB4 mutations were identified in 3 families with JEB-PA: two splice-site and one insertion mutation. Families 1 and 2 with lethal phenotypes were due to combinations of PTC and missense mutations (658delC/R252C and 3903dupC/G273D, respectively). However, two cases in our report had no gastrointestinal symptoms or signs of pyloric atresia (PA). (1) Family 2, infant born at 35/40 weeks, with marked aplasia cutis, especially around the neck, prominent subcutaneous veins, and dysmorphic facies, who died after 1 day; (2) Family 3, an affected sister and brother, had only mild skin involvement with blistering on the feet in summertime. Although both were homozygous for ITGB4 264G-A/3111-1G-A, only the brother had PA. In summary, these results suggest that pyloric atresia is an inconstant feature of the subtype of EB known as JEB-PA and that another factor must be determining whether the patient presents with PA or not. It could be that institutions which do not routinely screen IFM for integrin alpha 6 beta 4 staining in the absence of PA could be missing this form of EB.

Acknowledgement: Jinan Central Hospital, Shandong Province, China.

References

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Serono Sponsored Breakfast: Australian Psoriasis Collaboration: Moderate to Severe Psoriasis: Can We Improve Our Management of Traditional Therapies?

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What's new for improving safety and outcomes with methotrexate

A. Watson
Newcastle, New South Wales

Methotrexate has been used for psoriasis for over forty years but data on efficacy and safety is still evolving. This presentation discusses newer information regarding safety issues, including folic acid supplementation, liver toxicity, lymphoma, visual field defects and recommendations for monitoring to improve its safety profile are considered.

Efficacy as a combination therapy with other systemic agents for psoriasis and particularly its role in combination with biologicals will be addressed. It is concluded that there is a lack of good reproducible data (eg PASI) to assess methotrexate effectiveness and compare it with other systemic agents. There is a major need for such data and standardized data collection on an Australia-wide basic would greatly help this.

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Severe psoriasis, newer therapies, prescriptive Medicare authorities and learning from patients

J.R. Sullivan
Department of Dermatology, Liverpool Health Service, Sydney South West Area Health Service – Western Zone, University of NSW, Sydney, New South Wales

The new prescriptive style of PBS authorities for severe psoriasis is not based on well-designed evidence based studies critically evaluating how to best approach treatment of this often life-long disease. They differ from traditional Australian dermatology practice particularly in regard to acceptable toxicities of therapy. They also potentially devalue the great importance of safety considerations that are often the reason behind transitioning between therapies, therapeutic order followed, use of proven and theoretical synergistic combinations, and rotating or repeating therapies based on a patient’s past treatment history. Similarly the Medicare PBS authority describes patient’s different to those in the pivotal trials that are the basis for much of our knowledge about the use and safety of these new biologic agents.

Four instructive cases will be presented. These are the basis of a number of recent lessons I have learned from patients:

Unstable and rebounding psoriasis should be stabilized using traditional therapies. Starting a biologic on the PBS should be elective and planned. The PBS authority is based
on stable chronic plaque psoriasis and studies that have included a therapeutic washout period.

Severe psoriatics greatly under report their symptoms of psoriatic arthropathy and arthritis.

Preventing efalizumab rebounds. How I now make sure my patient’s started on efalizumab do not stop therapy without first contacting my team.

Forced intermittent treatment protocols do not necessarily need to mean cruelly watching a patient’s disease return. How I now try to utilize its theoretical safety benefits and utilize at least theoretically synergistic combinations to improve safety and sustain treatment efficacy.

Good medical care does not necessarily reflect prescriptively following recent Medicare authorities that have been shaped by pharmacoeconomic considerations and written by those not expert in treating this disease.

Never stop listening and learning from patients. Make your relationship with your severe psoriatics life-long. Continually re-evaluate your patient’s changing medical and dermatology needs.

### Rural Dermatology: The Way Ahead

#### Rural dermatology – What’s in it for me

L. Hale  
*Mildura Base Hospital and Mildura Specialist Skin and Cancer Clinic, Mildura, Victoria*

A presentation of the positive aspects of rural dermatology practice, from the perspective of a dermatologist resident in a relatively isolated rural centre. Professional, personal and social aspects will be explored to counter the sometimes negative impressions of rural practice encountered in the cities.

#### A rural dermatologist’s lament

I. McCrossin  
*Nowra, New South Wales*

The current mal-distribution of dermatologists between rural and metropolitan areas has not happened purely by chance. Although there are a number of advantages to living in the country there are also social, intellectual and financial disadvantages.
Socially the spouse or partner must be comfortable with a rural lifestyle, be able to find suitable employment particularly if male, and cope with diminished family support for the children when they are younger and boarding school if they are older.

Intellectually the dermatologist must be prepared to work with minimal contact with colleagues and registrars as well as lack of contact with the facilities of a teaching hospital. After a short time in a rural area one realizes that the perception of a proportion of patients and medical practitioners is that one's intelligence is inversely proportional to the distance from a capital city.

Financially, boarding school fees sap morale as does the cost of running a solo practice without the economies of scale available to group practices. Add to this the expense of travelling long distances to meetings.

Many of these problems and others to be discussed are difficult to satisfactorily address although I believe the problem can be solved with a combination of selection and teaching of medical students and registrars, financial incentives and support by colleagues.

**Cicatricial alopecia**

E.A. Olsen  
*Professor of Medicine, Divisions of Dermatology and Oncology, Duke University Medical Center, Durham, NC, USA*

Cicatricial alopecia (CA) is a term that encompasses a large number of poorly defined entities that can lead to permanent hair loss. The North American Hair Research Society (NAHRS) has developed a classification of CA based on the histology of early disease and whether the infiltrate is primarily lymphocytic or neutrophilic. Clinical clues to the diagnosis of a cicatricial alopecia and the typical findings of the most common disorders including lichen planopilaris (and its subtypes), folliculitis decalvans, discoid lupus erythematosus and the various presentations of cicatricial alopecia potentially related to pattern hair loss will be presented. Although current therapeutic options are able to halt further hair loss in only a few types of CA, there are treatments that can generally slow the progression in the others. A concerted effort is needed both to understand the etiology (genetic, environmental, autoimmune, etc) and to conduct controlled clinical therapeutic trials in each individual disorder of CA.
References

Donor site dominance in action: Transplanted hairs retain their original hair pigmentation long-term

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²Department of Medicine, The University of Melbourne, Victoria
³New Hair Clinic, Perth, Western Australia

The concept of ‘donor dominance’ in hair transplantation refers to autografts which continue to maintain their integrity and characteristics after transplantation to a new site¹. Such hairs may retain their original texture and rate of growth. Hair transplantation for patients with androgenetic alopecia rely on this concept of donor dominance for a successful and long-lasting result. Recently, the concept of ‘recipient dominance’ in hair transplantation has been debated. In a study of patterns after hair transplantation to the scalp and eyebrows in patients affected by madarosis, Lee et al.² found that the greying rate of hairs approximated the recipient site rather than the donor site.

We report on the long-term maintenance of follicular pigmentation in transplanted hairs. We describe two patients affected by both androgenetic alopecia and hair greying in the transplant recipient area. They were given autografts of hair follicles harvested from the occipital area, which consisted of mainly white hairs with pigmented hairs constituting 10–30%. More than one year post-transplantation, their donor hairs have remained pigmented long-term, despite being implanted in scalp affected by greying. In one patient the pigmented hairs have remained stable for 10 years. As the process of greying usually affects the temporal scalp first, then progresses onto the vertex and occiput later, the maintenance of long-term follicular pigmentation in our patients may be attributable to donor dominance.

References
Men with Kennedy’s disease have a reduced risk of androgenetic alopecia
R. Sinclair¹, K. Greenland¹, S. van Egmond¹, C. Hoedemaker¹, A. Chapman², J. Zajac¹
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Background: Spinal and Bulbar Muscular Atrophy or Kennedy’s disease (KD) is an X-linked recessive neurodegenerative disease caused by a functional abnormality of the androgen receptor gene on chromosomal locus Xq11-q12. Expansion of a polymorphic tandem CAG repeat in the first exon is correlated with age of onset and disease severity. Androgenetic Alopecia (AGA) is a polygenic trait also associated with functional polymorphism of the androgen receptor gene. We sought to investigate whether partial loss of function in the androgen receptor gene associated with CAG polymorphism reduces the risk of androgenetic alopecia in affected men.

Methods: Members of the Kennedy disease patient support group were invited to participate in an online survey to determine the age related prevalence of AGA among men affected by KD. Data from 113 male respondents with Kennedy’s Disease was compared to data from 332 white males of European descent in Maryborough, Australia.

Results: The mean AGA score for men with KD was 1.64 (95% confidence interval 1.41–1.87). The mean score for men in Maryborough was 2.82 (95% CI 2.71–2.93). Treating AGA score as a continuous variable we found age to be a highly significantly related to AGA score in men from Maryborough (p < 0.001) but not among men affected by KD (p = 0.90).

Conclusion: Men with KD have a reduced risk of AGA, possibly due to a functional alteration in the androgen receptor gene.

Clinical perspective from a male genital dermatology clinic
A.P. Hall
Male Genital Dermatology Clinic, Skin and Cancer Foundation (Vic), Carlton, Victoria

Clinical observations were gleaned from a male genital dermatology clinic. Knowledge of normal anatomy and common variants of male genital anatomy is valuable. Possible concerns of an underlying sexually transmissible infection (STI) or fear of a malignancy should be raised. Opportunistic screening for subclinical sexually transmissible infections should be undertaken when appropriate.
The value of biopsying genital skin is discussed. The presence of a foreskin is associated with a higher incidence of genital disease. The different appearance of common dermatoses affecting genital skin is discussed. Lichen planus may produce genital ulceration in uncircumcised males. Lichen sclerosus is a pre-malignant disease which may result in acquired phimosis or urinary obstruction. Zoon’s balanitis may be a reactive pattern rather than a true disease. Penile intra-epithelial neoplasia (PIN) is an important premalignant disease that should be recognized. Penile carcinoma is a rare disease and rarely seen in circumcised men. Benign pigmentary disorders including genital melanotic macules need to be differentiated from melanoma. The red burning scrotum syndrome is a distressing, under-reported disorder which is often poorly managed.

**What’s new in vulvar dermatology**  
*P. Selva-Nayagam*  
*Adelaide, South Australia*

The last 5 years has seen numerous developments in vulvar dermatology. This presentation will cover important facets in this area, including new terminology, new therapies, newly described vulvar dermatoses, and newly understood mechanisms of disease.

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**Tropical and International Dermatology**

**Peru – Some dermatological aspects**  
*T. O’Brien*  
*Geelong, Victoria*

Peru is a tropical country with a diverse geography and a population of mixed ethnic backgrounds, many of whom are indigenous.

Almost one third of the population lives in the capital, Lima. The profile of skin diseases seen here is similar to that seen in more affluent western countries but with fewer cutaneous malignancies and more common infections and infestations.

The classic cutaneous pathology of Latin America is seen in the rural and recently urbanised poor.

Some aspects of two pre-Columbian infectious diseases, American (New World) Leishmaniasis and Carrion’s disease (a form of Bartonellosis) will be presented.

Two new infections diseases, Balamuthia caused by a free-living amoeba and also the cutaneous aspects of HTLV-1 retroviral infection will also be discussed.
Finally, some initiatives by which the members of the Australasian College of Dermatologists may be able to participate in an ongoing relationship with Peruvian dermatology will be outlined.

Cutaneous, mucocutaneous and mucosal manifestation of HIV/AIDS in South Africa

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Division of Dermatology, Faculty of Health Sciences, University of Stellenbosch and Tygerberg Hospital, South Africa

In South Africa approximately 5 million people are living with HIV/AIDS. The socioeconomic impact is massive. The virus is transmitted sexually, nosocomially, vertically, through blood products and iatrogenically. With vertical transmission 20% of infants die within one year and 40% do not reach the age of six years. Inflammatory conditions, infections, infestations, and neoplasia, with declining immunity, present with atypical features. The most common inflammatory conditions are seborrheic dermatitis, psoriasis, nonspecific dermatitis and erythroderma. Pruritic papular eruption of HIV disease is characterized by widespread pruritic, excoriated papules and develops in patients with marked immunosuppression. In dermatophyte infection an expanding border and central clearing are often absent. Opportunistic fungal infections include cryptococcosis and histoplasmosis. Candidiasis involving the oral cavity may extend to the esophagus causing odynophagia. Disseminated herpes virus infection and herpes esophagitis are well described. Multidermatomal, ulcerating, hemorrhagic and disseminated herpes zoster indicate severe immune compromise. Varicella is commonly widespread, classical stages are absent, persistent keratotic lesions have been described and varicella pneumonitis may be associated. Lesions of keratotic scabies contain numerous organisms and transmission to caregivers is a risk. Occasionally multiburrow scabies is encountered. Kaposi's sarcoma presents with purplish patches and plaques on the trunk and extremities in patients with advanced HIV disease. Problems associated with antiretroviral treatment (ART) include cost, adherence, drug related side effects, drug interactions, and the immune reconstitution and inflammatory syndrome (IRIS). IRIS is characterized by the development of new inflammatory disorders or infections emerging within three months following institution of ARV or by the aggravation of such conditions. Patients are burdened by HIV infection, opportunistic inflammatory disorders and infections, side effects of ARV, drug interactions, IRIS, and, often concomitant tuberculosis.

Reference

Holistic care of HIV/AIDS patients in war torn areas of Northern Uganda
N. Etumoyee

Uganda remains committed in fight against the HIV/AIDS epidemic for over 20 years.

This one started with speculation and misconception about the epidemic. Later it was a big scientific problem which needed appropriate approach to tackle it.

Sustainability attributes to:
- Intensive public awareness
- Openness about HIV/AIDS
- Voluntary counselling and testing (VCT)
- Treatment of opportunistic infections (OIs)
- Home based care
- Surveillance to inform program planning

The early interventions were limited to urban areas leaving out rural population.

These were sold by support from Uganda AIDS commission World Health Organization and UNICEF.

These were expanded by:
- Abstinence
- Being faithful
- Use of condoms (ABC)

However, over 900,000 Ugandans are eligible for ARTs, of these over 8,000 are children. All hospitals (Government and non Governmental including Health centre IVs give PMTCT, HCT, all over the country.

HIV prevalence rates at 6% in 2004/05 compared to 18% in 1992. But there are variation geographically e.g. Northern Uganda in war torn areas, the prevalence is high up to 8%. This is due to transactional sex as a result of adverse poverty caused by insurgency, defilement, rape, attributed to lifestyle in the Internally Displaced Person Camps.

Vitiligo – The final solution?
L. Ranasinghe
Senior Lecturer and Examiner, Postgraduate Institute of Medicine, Colombo, Sri Lanka

Dreaded vitiligo distresses 2–4% people worldwide, and about 5 % of Sri Lankans. During the past 5000 years Egyptians, Chinese and Asian Indians were treated traditionally using herbal psoralens with reasonable success. Modern allopathy has used psoralens with solar exposure, since the 1940s. From the 1960s South Asians have been
adding modalities, including oral laevamisole and steroids, to the psoralens, with success approaching 80%. The cosmetic stigma of Vitiligo seriously affects “body mage” – distressing patients to depression and (social) withdrawal and suicidal thoughts. Ginkgo biloba (herbal) tablets are used in many advanced countries for numerous cerebral, neurological and peripheral vascular disorders, and is also marketed by several manufacturers in Australia. The author has treated recalcitrant cases of vitiligo with Australian ginkgo since June, 2006, with astonishing (documented) monthly improvement. More than 200 patients have been and are receiving ginkgo tablets in the past five months.

Reference

High prevalence of tinea capitis in newly arrived migrants at an English language school, Melbourne 2005
Michelle McPherson¹², K. Simpson², A. Woodgyer³, A.H. Chong⁴
¹National Centre for Epidemiology and Population Health, Australian National University, Canberra, ACT
²Department of Human Services, Victoria
³Microbiological Diagnostic Unit, The University of Melbourne, Melbourne, Victoria
⁴Department of Dermatology, St Vincent’s Hospital, Melbourne, Victoria

Introduction: When an English language school reported an observed increase in the prevalence of tinea capitis, the Department of Human Services, Victoria, conducted a screening program to determine whether this was an outbreak.

Methods: A screening program to detect tinea capitis was conducted at the primary school. It consisted of a clinical examination, collection of a scalp or skin scraping specimen where appropriate, and a scalp brushing using a standardised brush sampling method. Specimens were tested using the potassium hydroxide (KOH) test, and were inoculated for culture. Demographic data were provided by the school and comparison between cases and non-cases undertaken using the chi-squared test.
Results: Parental consent was obtained from 180 children (98%), of which 153 (85%) were screened. There were 31 cases: 15 involved *T. soudanense*, nine *M. audouini* and seven *T. violaceum*, corresponding to a prevalence of 20%. Compared to students without tinea capitis, a higher proportion of cases were Sudanese students; there were similar proportions of Arabic-speaking children and a lower proportion from other language groups (p = 0.002). There was a significantly higher proportion of braided hair among the cases compared with non-cases (43% and 9% respectively, p < 0.001).

Conclusions: Tinea capitis is rare for Australian school children, and so the prevalence of 20% is increased compared to the total primary school population in Victoria. Since newly arrived migrants are continually enrolling in this school, and others nationally, regular screening and treatment at these schools is recommended.

Hair loss in females
E.A. Olsen

*Professor of Medicine, Divisions of Dermatology and Oncology, Duke University Medical Center, Durham, NC, USA*

Hair loss in women is extremely common and often difficult to diagnose quickly and treat effectively. The most common type of hair loss in women is female pattern hair loss (FPHL) which may be confused at times with chronic telogen effluvium, diffuse alopecia areata, various types of cicatricial alopecia and even trichotillomania. Tips for making the diagnosis of FPHL both by clinical evaluation alone and by combining this with microscopic evaluation of the hairs obtained by hair pull or biopsies of the scalp will be reviewed. The appropriate laboratory studies to fully assess any associated hyperandrogenism/hyperandrogenemia and its causes including polycystic ovarian syndrome and nonclassic congenital adrenal hyperplasia will be outlined and current treatment options will be presented.

References
Genetics and skin cancer – What’s the relevance
J.T. Lear
Central Manchester Dermatology Centre, Manchester Royal Infirmary, University of Manchester, Manchester, UK

Non-melanoma skin cancer (NMSC) is the commonest cancer in Caucasians and its incidence is increasing worldwide. The prevalence of this cancer is predicted to equal that of all others combined and it was estimated that there were over 1 million cases diagnosed in the USA in 2004. Patients exhibit marked differences in clinical phenotype with variations in tumour numbers, rate of tumour accrual, site and histologic subtype. Furthermore, patients are at increased risk of other cutaneous and non-cutaneous cancers. The factors accounting for this variation are complex and still not completely understood. Clearly, ultraviolet light (UV) exposure is a major influence but its relationship to clinical phenotype is not yet clear. In addition, immunosuppression is a significant risk factor. Our group has identified high risk groups for the development of further BCC, namely patients with truncal basal cell carcinoma (BCC) and those presenting with tumour clusters. This presentation will concentrate on these clinical subgroups as well as immunosuppressed patients. These groups represent significant management challenges and are areas where novel, non-surgical treatment options may make a significant clinical impact in patient care. Potential clinical applications, including predictive indices, will be considered. Other genetic influences will be considered with particular reference to clinical applicability.

Galderma Sponsored Breakfast: Metvix-PDT – The Now and the New in NMSC Treatment

Future applications for PDT in NMSC
J.T. Lear
Central Manchester Dermatology Centre, Manchester Royal Infirmary, University of Manchester, Manchester, UK

Metvix-PDT is now an established treatment modality for a variety of cutaneous cancerous and pre-cancerous lesions. This presentation will address future areas of research interest and clinical use of Metvix-PDT in non-melanoma skin cancer (NMSC). The focus will be on clinical applications of Metvix-PDT. In particular, the following areas will be covered:

Effects of Metvix-PDT at a molecular level with emphasis on mode of action and the potential for prophylaxis and influence on field change areas; molecular effects of tumour shrinkage and reduction of surgical margins.

Ways of optimising Metvix-PDT in NMSC therapy and diagnosis to include chelators and fluorescence diagnosis.
Combinations of treatments to widen the spectrum of patients and types of lesions treated and enhance efficacy. The use of systemic and topical PDT in patients with Gorlin’s Syndrome will be briefly discussed. Furthermore, the use of anti-HPV therapies in combination with Metvix-PDT will also be discussed in the context of vulval intra-epithelial neoplasia (VIN) and transplant patients.

With an already established role in NMSC management, the further/future uses of Metvix-PDT will be within the more difficult patient sub-groups where at present, treatments can be unsatisfactory both for clinicians and patients alike. Prophylaxis will also be an important emerging use of Metvix-PDT in these groups, with both clinical and molecular genetic data to support its use for this indication.

Interrelationship of the major inflammatory reaction patterns of the skin and oral mucosa
S. Kossard
Skin and Cancer Foundation Australia, Sydney, New South Wales

The major epidermal reaction patterns in the skin are spongotic, psoriasiform and lichenoid but in the oral mucosa lichenoid patterns dominate. The differential diagnosis of oral lichenoid reactions from a histological standpoint can be challenging and clinical and cutaneous findings offer the main clues to correct diagnosis. Infections, drugs and cutaneous epidermotropic T-cell lymphomas or parapsoriasis may induce mixed epithelial patterns. In contrast dermal reaction patterns such as granulomatous diseases, urticaria or vasculitis are co-expressed in the mouth. The basis for the restricted epithelial patterns may reflect basic differences in lymphocyte homing and fundamental differences in the makeup of the oral mucosa particularly in respect of innate and acquired immunological pathways as well as the oral mucosal physiological properties. The study of differences in these major reaction patterns in the skin and oral mucosa may provide insight into understanding the differences between these sites.

This presentation will explore differences in tissue reactions targeting the epithelium in the mouth and skin.

What new is adolescent dermatology?
G. Fischer
Royal North Shore Hospital, St Leonards, New South Wales

What exactly is “adolescent dermatology”? Is it just teenagers with acne? Does it have more in common with paediatrics or adult dermatological practice?
Adolescents are a group which we tend not to treat separately in our specialty. Yet it is now being recognised that they are a unique group, and specific adolescent units now exist in Sydney and Melbourne.

Although adolescents share skin problems more closely with adults than children, their concerns differ from the adult group and there are important issues related to consent, self-determination and self-image that are a major part of dealing with them successfully.

Adolescents are a healthy group in a medical sense, and their reasons for presenting to doctors are often psychosocial. Mental health problems account for at least half the disease burden in this group.

This presentation is an overview of the major issues for dermatologists dealing with adolescents and an account of what comprises adolescent dermatology, based on a 6 month clinical audit and review of the literature.

**Isotretinoin and depression: Are we seeing it?**

E. Starritt, G. Fischer  
*Department of Dermatology, Royal North Shore Hospital, St Leonards, New South Wales*

Since the introduction of Isotretinoin in the US in 1982 as an effective treatment for nodulocystic acne, there has been concern about association between Isotretinoin therapy and depression. The US FDA received 431 case reports of depression, suicidal ideation, suicide attempts and suicides between 1982 and 2000. However, no causal relationship has ever been born out in any of the epidemiological and prospective cohort studies to date.

We present the case of a 17 year old man with severe nodulocystic acne who completed an uneventful first course of Isotretinoin (200 mg/kg) with good results. A second course was commenced 6 months later for recurrence; however, two months into this he developed significant depressive symptoms despite his skin clearing. These symptoms included depressed mood, disinterest in daily activities and he was missing school. Isotretinoin was ceased and three weeks later these symptoms resolved.

Similar cases exist in the literature, however prevalence is unclear. We are currently surveying Australian dermatologists and aim to present an estimate of prevalence and details of similar cases. As the sole Isotretinoin prescribing group in Australia, awareness of possible idiosyncratic effects is important as the issue of depression and Isotretinoin remains one of the more emotive and contentious medical issues in the community, attracting regular media commentary and greatly influencing community perception of this treatment.
Low dose isotretinoin for mild to moderate rosacea
M. Rademaker
Tristram Clinic, Hamilton, New Zealand

Introduction: Rosacea is a chronic inflammatory disorder that affects 10% of the population. Standard treatments include topical preparations such as azaleic acid and metronidazole, or low dose tetracyclines. Isotretinoin has generally been confined to severe disease, when a dose of 0.5–1.0 mg/kg/day has been used.


Results: 52 patients (33 female) with mild to moderate rosacea were treated with isotretinoin. Average age was 54 years (range 18–86 years). 18 patients also had persisting adult type acne vulgaris. Patients were treated with a variety of dosaging regimens. The most common starting dose was 20 mg/day, irrespective of body weight. At first review (usually 3 months), dosages were reduced to 10–20 mg × 2–3/weeks. In terms of dose/kg/day, 29% received <0.1 mg/kg/day, 38% (0.1–0.2 mg/kg/day) and only 10% received >0.5 mg/kg/day. Treatment was continued for 57 weeks (range 9–223 weeks).

Rosacea had cleared in 65%, was considered excellent in 17% and was controlled in 6%. 6 patients (12%) did not attend for follow-up, and two patients stopped isotretinoin because of adverse effects. 20 patients (38%) were still on treatment at the end of the study.

44% of patients suffered no adverse effects. The most common side-effect was cheilitis (52%), which was regarded as mild and manageable.

Commentary: Low-dose isotretinoin (10–20 mg × 2–3/week) is an effective treatment of mild to moderate rosacea, which is well tolerated.
Background: Biologics for psoriasis are an emerging therapeutic option. The growing range of biologics along with the prescriptive nature and complexity of the Medicare Authority, have lead to the Department of Dermatology at Liverpool Health Service setting up a dedicated physical clinic and support service for the purpose.

Materials and methods: Dermatologists can utilize any aspect of the service to assist them in the management of patients with moderate to severe psoriasis.

Our nursing team can be consulted to obtain patient consent to collect and collate their medical history including details of their psoriasis, its treatment history, including dosing of systemic therapies and their commencement and end of therapy dates. Details regarding treatment response and complications of therapy are also compiled.

Our nurses also offer a supervised PASI assessment service. We also organize tuberculosis screening and follow up results and organize specialist review as appropriate.

For those referred to the medical service a complete medical history and examination including PASI is performed. If suitable for consideration of a biologic (Medicare Authority or Clinical Trial), work-up with regard to pre-treatment investigations, is ordered.

At subsequent visit, the patient is assessed for suitability for a selected biologic agent and a detailed discussion regarding the expected outcomes, possible adverse effects, with informed consent done.

Medicare authority applications are completed. Once a biologic is commenced reviews are organized to monitor therapy. Reviews are scheduled to help optimise PASI response at the pre-determined time periods specified in the Medicare schedule. This is done by optimising concurrent topical therapies and if also needed e.g. adding in phototherapy 6 weeks prior to assessment dates.

Patients on biologics are able to page or contact our nursing staff by telephone for any potential medical and treatment related concerns.

Conclusion: During this session we will present our clinic worksheets and protocols. We have found this service a
good way to help our department and area dermatologists better meet the challenges of incorporating biologics into normal clinical practice.

Polarized light dermoscopy versus immersion contact dermoscopy – Are there differences?
C. Benvenuto-Andrade¹, A.L.C. Agero¹,², S. Dusza¹, A. Scope¹, A. Halpern¹, A. Marghoob¹
¹Memorial Sloan-Kettering Cancer Center, Dept of Dermatology, New York, NY, USA
²St George Hospital, Department of Dermatology, NSW

Introduction: Dermoscopy is a valuable tool in the diagnosis of pigmented and non-pigmented skin lesions, increasing the clinical diagnostic accuracy, and improving physician’s confidence in the clinical diagnosis. Immersion contact dermoscopy has been the standard of dermoscopy training/courses and in capturing dermoscopic images for textbooks and manuscripts. However, new commercially available polarized-light dermoscopes have been recently introduced and gaining popular use.

Method: Skin lesions were imaged using conventional immersion contact dermoscopy, polarized contact dermoscopy, and polarized non-contact dermoscopy. The images from the three modalities were evaluated by 5 dermatologists for the dermoscopic colors, structures and overall patterns. Level of agreement between modalities was assessed by percent agreement and kappa. Qualitative differences between modalities were also assessed.

Results: Ninety lesions comprising of 55 melanocytic lesions (18 melanomas, 6 common nevi, 5 congenital melanocytic nevi, 7 blue nevi, 16 dysplastic nevi, and 5 lentigines) and 35 non-melanocytic lesions (7 actinic keratoses, 5 dermatofibromas, 5 basal cell carcinomas, 15 seborrheic keratoses, and 5 squamous cell carcinomas) were reviewed. There was excellent to almost perfect agreement for overall dermoscopic patterns between modalities with kappas ranging from 0.89 to 1.0. There was moderate to excellent agreement for most dermoscopic colors. Most dermoscopic structures had fair to perfect agreement. Qualitative assessment suggested that under polarized light dermoscopy, melanin appeared darker, vessels/red areas and blue-white/regression areas were better visualized. Milia-like cysts and comedo-like openings were better visualized under conventional immersion contact dermoscopy.

High energy fractional resurfacing for acne scarring
C. Weinstein, R. Bosnich
Melbourne, Victoria

Background and objectives: To evaluate the efficacy and safety of high energy fractional resurfacing in the treatment of severe acne scarring.
Study design/material and methods: 357 patients with severe acne scarring were treated using the Fraxel (Reliant) laser: 159 males and 198 females. 181 patients were Fitzpatrick skin types 1–3, 78 patients skin type 4, 85 skin type 5, and 15 skin type 6. All were treated as outpatients using topical and injectable local anaesthesia. Patients received between 1–5 treatments according to need. All patients were treated initially using the following parameters 125 MTZ/cm² 25 mJoules for 8 non-overlapping passes. Further passes were made using 125 MTZ/cm² 25–35 mJoules according to severity and depth acne scarring. The number of extra passes varied from 4 to 10 according to operator's perceived depth and extent of scarring. There were no obvious “end points”.

Following treatment, patients with skin types 4–6 were given depigmenting lotion containing Hydroquinone and retinoid acid. Moisturisers and sunscreens were also used.

Results: Results were assessed by two independent observers at 6 weeks and 12 weeks after last treatment. All patients achieved an improvement in acne scarring even after the first treatment. 12% achieved excellent improvement (>75%), 75% good improvement (50–75%), 15% fair improvement (25–50%). There was a high degree of patient satisfaction. Healing times were 3–7 days until makeup could be worn and patient return to work. Complications were uncommon. 1 patient with skin type 5 developed temporary post inflammatory hyperpigmentation due to failure to use depigmenting lotion. 1 patient developed localized scarring which resolved with intralesional 5 Flurouracil. There were no cases of infection or hypopigmentation.

Conclusion: High energy fractional resurfacing is a very effective treatment for acne scarring and is suitable for all skin types. It is safe and has few risks compared to other treatments for acne scarring.

Review of collagen VII mutations found in Australian patients with dystrophic epidermolysis bullosa reveals 9 novel COL7A1 mutations

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Introduction: Dystrophic epidermolysis bullosa (DEB) is an inherited skin fragility disorder whereby blistering occurs in the sub-lamina densa zone at the level of anchoring fibrils (AFs) of the dermo-epidermal junction. It is inherited in both an autosomal dominant (DDEB) and an
autosomal recessive manner (RDEB). Both RDEB and DDEB result from mutations in the type VII collagen gene (COL7A1).

**Method:** Skin biopsies from patients were processed for IF antigen mapping. Where there were sub-lamina densa splits and/or a reduction or negative Collagen VII antibody staining, the COL7A1 genes were screened for mutations. A review of known mutations of the type VII collagen gene and the genotypes and phenotypes of the patients with DEB was undertaken.

**Results:** We report 15 Australian families with different forms of dystrophic epidermolysis bullosa (DEB) with 23 different COL7A1 allelic mutations, 9 of which were novel mutations. 4 cases of RDEB-HS combined two PTC mutations and 5 cases of RDEB-HS combined a PTC in one allele with a second splice-site or silent glycine substitution mutation in the other allele. G2043R, a de novo and dominant mutation, was identified again in this study. Four recessive silent glycine substitution mutations were found, G2775S and G1673R (novel), G1338V (novel) and G2791A. Family 3 with DDEB combined R2791W and novel G2210V and had a Pasini phenotype in most individuals, but two members of the family had severe DDEB pruriginosa. From these 3 prenatal diagnoses have been performed.

**Acknowledgement:** Jinan Central Hospital, Shandong Province, China.

**References**

**Complete resolution of recurrent calciphylaxis with long-term intravenous sodium thiosulfate**
K. Subramaniam, B. Saker
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**Introduction:** Calciphylaxis, a rare complication of end stage renal impairment is characterised by small vessel medial calcification, intimal hypertrophy and thrombosis resulting in ischaemia and necrosis of skin, subcutaneous fat and skeletal muscle. It is associated with significant morbidity in form of pain and sepsis with mortality rates ranging from 30% to 80%.

**Method:** We describe a case of a 37-year-old morbidly obese woman on home haemodialysis who presented, 2 years post parathyroidectomy, with painful indurated subcutaneous nodules histologically characteristic of calciphy-
laxis. After not responding to conventional treatment, she commenced an infusion of 25 g of sodium thiosulfate three times per week.

**Results:** After 2 weeks of commencing sodium thiosulfate, the pain resolved completely and the lesions completely healed in 12 weeks, at which time the infusions were ceased. 2 months later, the lesions recurred but completely resolved again within 5 months of recommencement of intravenous sodium thiosulfate. This time, the sodium thiosulfate infusion was continued for 8 months. The treatment was well tolerated with no side effects. There has been no recurrence of lesions in the last 14 months since the cessation of sodium thiosulfate.

**Conclusion:** In the case described, intravenous sodium thiosulfate was not only a successful treatment for the life-threatening condition of calciphylaxis; it provided rapid resolution of signs and symptoms with no side effects. The observation that a recurrence of calciphylaxis again responded to intravenous sodium thiosulfate indicates cause and effect rather than coincidence. Additional proof-of-concept studies are warranted to assess intravenous sodium thiosulfate treatment for refractory calciphylaxis.

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**What’s New**

**Medical dermatology – What’s new?**

W. Weightman  
**Adelaide, South Australia**

This presentation will discuss recent advances in medical dermatology by reviewing journal articles over the last year.

**Poster Presentations**

**Naevus of Ota presenting in two generations – A mother and daughter**

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**Case 1:** A 5-year-old Chinese girl presented with bluish discoloration on the right side of the face and shoulder present since birth. Gradual progression with expansion of involved areas and darkening of the blue-gray-colour prompted referral to dermatology.
Examination revealed a unilateral bluish-gray patch on the right side of the face, with homogenous bluish pigmentation on the right periorbital area, and speckled bluish-brown pattern over the right malar area, associated with scleral and oral mucosal melanosis. The bluish discoloration was also noted on her right shoulder area, extending to the neck, ear lobes and scalp. Smaller bluish patches were noted on the left arm, left lower back, and both lower extremities.

**Case 2:** Her mother, a 46-year-old woman, had a similar ipsilateral bluish-gray pigmented patch limited to her left periorbital area noted since birth, but had no other areas of involvement other than her left sclera and palate.

**Discussion:** We present the appearance of naevus of Ota in two generations. To our knowledge, this is likely only the seventh reported case of familial nevus of Ota in the literature, and significantly, this is the first familial case wherein it is associated with naevus of Ito and widespread cutaneous melanocytosis. These dermal melanocytic conditions represent incomplete embryological migration of melanocytes from the neural crest. The possibility of an inheritable genetic defect is suggested by its expression in two consecutive generations.

**References**

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**UV induced immunosuppression and its implications for sunscreen formulation**

**G. Aldous**

*Hamilton Laboratories, Adelaide, South Australia*

**Introduction:** Radiation from the sun reaching the earth consists mainly of infrared, visible and ultraviolet radiation. The latter of wavelength 290–400 nm makes up only between five and seven percent of the total radiation reaching the earth’s surface, but is the prime ecological agent responsible for both melanoma and non melanoma skin cancer, erythema, skin aging in humans and, in the last two decades, its ability to suppress the immune system has been the subject of intense research. It is now recognised that both UVA (320–400 nm) and UVB (290–320 nm) can cause specific damage to the DNA in the nucleus leading to gene mutations capable of leading to skin cancer. UV radiation appears to have a dual role in the induction of skin cancers, it can cause direct DNA damage and suppress the immune response to developing skin cancers. The ability of sunscreens to protect the immune system against UV induced suppression has been demonstrated in numerous studies to be variable with some sunscreens providing no protection at all.
Method: To determine the effectiveness of a sunscreen specifically formulated to provide protection against systemic and local UV induced immunosuppression, studies were conducted utilising mice and human models. The extent of systemic immunosuppression was determined using a contact hypersensitivity model in mice, while the degree of local immunosuppression was determined using a nickel-allergy model in humans.

Results: The contact hypersensitivity (CHS) study in mice showed significant protection of the systemic immune system by the test sunscreen against UV induced immunosuppression. The test sunscreen also provided significant protection against local immune suppression in humans as determined using the nickel-allergy model. When a second broad spectrum sunscreen of different formula was tested using the CHS mouse model, no significant protection of the immune system was found. It cannot be assumed all broad spectrum sunscreens provide protection against UV induced immunosuppression, the only way to determine the ability of a sunscreen to protect the immune system is to conduct studies ensure protection against both systemic and local suppression.

Nephrogenic systemic fibrosis following renal transplantation
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Nephrogenic systemic fibrosis (NSF) is an emerging disease among patients with renal insufficiency. Typical lesions comprise indurated ill-defined plaques distributed symmetrically over limbs and trunk, which can contain papules and nodules. Associated features include hypercoagulable states, thrombotic events, and surgical procedures preceding the onset of disease. Histology reveals infiltration and proliferation of dermal fibroblasts, thickening of collagen bundles and prominent areas of angiogenesis. Dermal spindle cells are immunohistochemically positive for both CD54 and procollagen. We describe the first reported case of NSF in Australia.

A 36-year-old female initially presented with a 2–3 year history of lesions over her lower legs. Examination demonstrated multiple, non-tender, brown papules within indurated plaques over her lower legs bilaterally. Histology at this time revealed a light perivascular lymphoid infiltrate, activated fibroblasts and prominent capillary vessels. Amyloid stains were negative. Review twelve months later revealed persistence of these lesions.
The patient had undergone renal allograft in 1994 due to renal failure secondary to mesangiocapillary glomerulonephritis. Her renal function declined, and hemodialysis was recommenced in July 2006. Her past history also included multiple deep vein thromboses warranting the use of warfarin, despite a negative thrombophilic screen.

The combination of clinico-pathologic findings and associated thrombotic events, on the background of renal insufficiency, support the diagnosis of NSF.

Sweet's syndrome within an Australian hospital:
A retrospective analysis

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²Department of Pathology, St Vincent’s Hospital, Melbourne, Victoria

Background: Sweet's syndrome (acute febrile neutrophilic dermatosis) is often classified according to its associations. This classification may not predict clinical presentation or outcome of the syndrome.

Aim: To stratify a patient population according to the associations of Sweet's syndrome and report the clinical and laboratory findings.

Methods: A retrospective analysis of was performed of ten patients meeting the clinico-pathologic diagnosis of Sweet's syndrome identified over a ten year period, within St Vincent's Hospital, Melbourne.

Results: Ten patients met the inclusion criteria, six of whom were male, the mean age of presentation being 48 years. Two patients had preceding streptococcal infection, two had associated inflammatory bowel disease, three had idiopathic Sweet’s syndrome and three had an underlying malignancy, one of whom was receiving G-CSF. Although only four patients were found to have a normal white cell count, ESR/CRP was elevated in all patients when it was measured. With regard to outcome, six patients required oral steroids, to which they were responsive; two patients had spontaneous resolution, whilst the remaining two patients were lost to follow up.

Conclusion: The associations of Sweet's syndrome do not predict clinical presentation or outcome. Elevated ESR/CRP appears to have a stronger predictive value for diagnosis than elevated white cell or neutrophil count. Systemic steroids remain the mainstay of therapy for Sweet’s syndrome failing to resolve spontaneously, regardless of extracutaneous manifestations or associations.
Modification of film forming properties of alcohol based sunscreens to improve water resistance and static SPF
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Hamilton Laboratories, Adelaide, South Australia

Introduction: Sunscreens are designed to deposit a continuous oily film containing the sunscreening agents upon the skin. Ideally this film should be a uniform 20 microns thick, although in reality the consumer rarely applies sufficient sunscreen to obtain this thickness. Alcohol based sunscreens sprays are popular with medical professionals and consumers due to the ease of application, favourable cosmetic characteristics and the absence of preservatives.

They do however suffer from several disadvantages:
• The poor film forming properties of the sunscreen as the alcohol evaporates, leads to a thin film and therefore requires high levels of sunscreening agents to obtain an SPF of greater than 30
• They lack any substantial water resistance
• The low viscosity of the film produced as the alcohol evaporates tends to pool in the depression of the skin reducing further the SPF

Recent patented technology developed by Hamilton Laboratories addresses these disadvantages through enhancement of the film forming properties of alcohol based sunscreens.

Method: To compare the effectiveness of a sunscreen incorporating a novel film forming technology to one without such enhancements the SPF and water resistance of the two sunscreens were determined by the methodology described in AUS/NZ Standard 2604:1998.

Results: The sunscreen containing the enhanced film forming technology produced a significantly higher SPF and greater water resistance when compared to the sunscreen not containing the technology. This is a reflection of the novel film formers ability to provide a continuous, hydrophobic film once the alcohol has evaporated.

Subcutaneous injections: What are we doing to our skin?
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Many drugs have been administered via subcutaneous injection over the past 50 years. Some have had medicinal purposes, some recreational and others cosmetic. All have been associated with local skin reactions.
Some of these adverse events are well recognised such as insulin – lipoatrophy, vaccines – pain and swelling, vitamin K – localised sclerodermoid plaques, silicon – siliconomers, and heparin – localised skin necrosis.

Subcuticular injections are now being used to deliver a number of newer therapies which cannot be taken orally. These include interleukin 2 used for the treatment of HIV and numerous metastatic cancers; beta interferon for the treatment of multiple sclerosis and hepatitis C; etanercept a tumour necrosis factor inhibitor used for the treatment of psoriatic arthritis, psoriasis and rheumatoid arthritis; glatiramer acetate, a myelin analog used for the treatment of multiple sclerosis, and a new HIV therapy, enfuvirtide, a fusion inhibitor.

We report four cases in which subcuticular injections have produced panniculitis and necrosis, resulting in long term atrophy or sclerosis. These medications are generally reported as producing mild well tolerated cutaneous reactions, but we demonstrate that they are not always as mild as the companies like to report that they are. Our cases include reactions to interferon beta, interleukin, enfuvirtide and glatiramer acetate.

Methotrexate has been previously described as an effective treatment for febrile ulceronecrotic PLEVA. However, its use for more chronic PLEVA has not been as extensively documented. Although PLEVA prognosis is generally good, it is a chronic relapsing condition and first-line treatments may be ineffective or inconvenient for the patient to adhere to. We describe a 54 year old male who presented with a 5 year history of biopsy proven PLEVA. He had responded to narrow-band UVB (5 × per week) but could not continue the treatment due to work commitments. He did not respond to oral erythromycin (500 mg bd) and dapsone (100 mg daily) and was commenced on oral methotrexate (12.5 mg per week). All lesions resolved within 2 weeks, but the condition recurred within 2 weeks after the patient stopped his treatment. He was recommenced on methotrexate and the lesions again showed a quick and sustained response. He now remains on a maintenance dose of 10 mg per week with no further relapse.
Treatment of extensive cutaneous metastatic melanoma with topical diphencyprone
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Diphencyprone (DPCP) is a potent contact sensitiser frequently used to treat alopecia areata and cutaneous warts. A patient with previous primary nodular melanoma on the scalp developed extensive, confluent cutaneous metastases near the primary site, unsuitable for treatment with surgery or radiotherapy. Topical treatment with DPCP as a single agent resulted in regression of all lesions, and the patient remains well 17 months later. Topical immunotherapy with DPCP can be an inexpensive and well-tolerated treatment for extensive cutaneous melanoma metastases unsuitable for other therapies.

Photodynamic therapy in dermatology: From clinical trials to clinical practice
Q.O Dinh, S. Cumming, C. Holmes, P. Foley

Department of Dermatology, St Vincent’s Hospital Melbourne, Victoria

Photodynamic therapy (PDT) has emerged recently as a major non-surgical treatment option in dermatology. Clinical trials offer good evidence for its efficacy in solar keratoses (SK), basal cell carcinoma (BCC), and Bowen's disease. Advantages include superior cosmetic outcomes and relatively few side effects, which include localised pain, hypo- or hyperpigmentation, and local short term cutaneous photosensitivity.

The St Vincent's Hospital PDT database represents a single centre prospective record of PDT usage in clinical dermatology over the last 20 months. Treatment and follow up outcomes have been analysed for a total of 101 lesions (fields of SK considered one lesion). These outcome measures are compared with those quoted in recent clinical trials. This allows an appraisal of whether clinical trial research readily translates to improved clinical practice and optimised patient management.

All lesions included have completed 3 month follow-up reviews. The majority were SK, Bowen's disease, and superficial BCCs. Small numbers of nodular BCCs were also treated. Lesions treated were commonly on the face (38%).
lower limbs (33%), and scalp (11%). Overall, 78% of lesions showed evidence of clearance. Only 2% of lesions required more than 2 PDT treatments. Cosmetic result was good to excellent in more than 70% of patients.

These data support results from the literature and suggest that PDT can find clinical utility in tertiary hospitals as a nonsurgical therapeutic modality for premalignant/malignant skin conditions.

Melanoma in organ transplant patients: The old enemy finds a new battleground
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2Transplant Dermatology Clinic, Skin and Cancer Foundation, Victoria

Introduction: The authors present a personal review of melanoma in solid organ transplant recipients to examine current evidence regarding this issue.

Methods: A MEDLINE literature search was conducted for articles within the last 20 years with the terms “melanoma”, “transplant”, and “transplantation”. Reference lists of these articles were also searched for additional relevant articles. 14 articles were of sufficient quality for further analysis.

Results: Epidemiology: Population registry data demonstrated that melanomas within the transplant population occur 1.5–2.0 times more commonly compared with the general population. There were no studies examining risk factors for the development of melanoma in transplant recipients.

Prognosis: Only one study examined the prognosis of melanomas within this population1. The Israel Penn International Transplant Tumour Registry has collated patient data voluntarily submitted by transplant physicians throughout America since 1968. The author analysed 164 melanomas and found that over half were Breslow thickness >1.51 mm. Overall, there was a higher rate of nodal and distant metastases, leading to poorer 1, 5 and 5 year survival rates compared with the general population.

Conclusions: There is a paucity of good quality evidence regarding melanoma in organ transplant recipients. Further research, particularly on risk factors and the prognosis of melanomas in this population, would be important.

Reference
Photodynamic therapy in dermatology: From clinical trials to clinical practice
Q.Q. Dinh, S. Cumming, C. Holmes, P. Foley
Department of Dermatology, St Vincent’s Hospital Melbourne, Victoria

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These data support results from the literature and suggest that PDT can find clinical utility in tertiary hospitals as a nonsurgical therapeutic modality for premalignant/ malignant skin conditions.

Skin cancer surveillance in renal transplant patients: A survey of Australian Transplant Centres
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²Department of Nephrology, St Vincent’s Hospital Melbourne, Victoria

There were 6559 patients with a functioning kidney transplant in Australia at the 31st of December 2005. Within this population, non-melanoma skin cancers are the most common post-transplant malignancy.

We performed a survey examining skin cancer surveillance practices in 17 transplant centres caring for the majority of these transplant recipients in Australia. Fifteen responses (88%) were received. Routine screening for skin cancer
was performed by 12/15 centres (80%) pre-renal transplanta
tion and 11/15 (73%) of centres post-transplantation. Two of the 3 centres that provided no routine screening
either pre or post-transplantation were paediatric hospitals.
Ten centres reported that their post-transplant patients
were screened at least annually by dermatologists.

Patient sun-protection education was provided by all
centres. These were commonly in the form of written infor-
mation (all centres) and verbal advice from transplant cli-
nicians (14/15 centres).

The improvement of current skin surveillance practices
and development of further education resources was con-
sidered important universally, with patient-oriented written
literature, routine clinician screening of post transplant
patients, encouragement of patient self-screening, and pro-
vision of staff training in skin cancer education and pre-
vention viewed as particularly important initiatives.

Reference
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   Transplant Registry. Adelaide, South Australia.
**Quality of life evaluation in epidermolysis bullosa**

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**Introduction:** Epidermolysis bullosa (EB) is a group of genetic skin blistering disorders which causes significant pain and physical deformity. While the physical impact of EB is obvious, psychosocial parameters are often overlooked. The aim of this study is to develop a valid and reliable quality of life (QOL) questionnaire to evaluate the physical and psychosocial impact of EB. Generic quality of life and burden of disease tools have poor sensitivity for detecting disability in EB.

**Methods:** Non-structured interviews were conducted with 44 EB patients and their families in order to generate initial items for a pilot questionnaire. Relevant experts in the field involved in the care of EB patients were also interviewed. A content analysis of the interviews was conducted which revealed 164 items which were compiled into a pilot questionnaire of 49 questions. The pilot questionnaire was distributed and after assessment of internal consistency, a final questionnaire was developed. This EB-specific tool was validated against established generic QOL indices, pain, function and psychosocial parameters. Test-retest reliability of the final questionnaire was also conducted.

**Conclusion:** Epidermolysis Bullosa is associated with considerably impaired quality of life which varies according to disease subtype. The questionnaire developed was valid and reliable in evaluating quality of life in this cohort of EB patients. This questionnaire has potential to identify areas for intervention, and to measure the response of interventions in EB.

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**Gamolenic acid, stearidonic acid, nicotinamide and eczema**

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¹Ego Pharmaceuticals, Victoria
²Technical Consulting Services

**Introduction:** Gamolenic acid, stearidonic acid and nicotinamide have been promoted as beneficial for eczematous skin. QV Cream is a registered therapeutic for the treatment and relief of dry itchy skin conditions, such as eczema. This study was to determine if the addition of gamolenic acid, stearidonic acid or nicotinamide would improve the efficacy of QV Cream on eczema.

**Method:** QV Cream was extemporaneously blended with: a combination of gamolenic and stearidonic acids (Blend A); or nicotinamide (Blend B). Healthy subjects diagnosed by a medical practitioner as having eczema were enrolled. The subjects were given two formulations in a blinded
fashion and instructed to apply each product to one of two pre-selected eczematous areas daily for 10 days.

Round one compared QV Cream with Blend A; round two compared Blend A with Blend B.

At days 5 and 10 of product application the subjects answered a series of questions relating to the relief of their condition.

**Results:** The efficacy of Blend A compared to Blend B was considered equivalent by the subjects at both the 5 and 10 day time points.

The efficacy of QV Cream was considered superior to Blend A by the subjects at both the 5 and 10 day time points.

**Conclusion:** The addition of gamolenic acid, stearidonic acid or nicotinamide, all claimed to offer benefits in the relief of eczema, did not improve the efficacy of QV Cream.

QV Cream is an effective, registered, treatment for dry itchy skin conditions such as eczema.

**Paraffins and pimples**

K.A. Greive  
Ego Pharmaceuticals, Victoria

Since ‘acne cosmetica’ was first described in 1972, topical products have been suspected in comedone outbreaks, with paraffins often accused of being the culprit. While it is known that some substances applied topically can induce comedones, direct involvement from topical products is rare.

Paraffins, light liquid and soft white, are highly effective emollients and have been used in cosmetics and therapeutics for many decades. Today paraffins are used as emollients in creams and ointments, as an ophthalmic lubricant and in sterile dressings. Paraffins are non-toxic, non-irritating, inert, non-allergenic, have GRAS status and are generally considered innocuous.

Historically the standard test for comedogenicity was the rabbit ear test. This test was widely used for many years and utilized paraffin as the validated negative control. Paraffin did not block pores, cause comedones or follicular eruptions.

Today we have human protocols to test comedogenicity. The human protocol involves maintaining product to skin contact constantly for six weeks. Follicular biopsies are
then used to determine if the test product has caused an increase in comedones or follicular eruptions.

Using the human protocol for comedogenicity three topical products were tested containing, 5%, 10% or 15% total paraffins. All three products were found NOT to cause comedones and in fact showed benefit over the untreated control.

Paraffins are often accused of being comedogenic; however historical data and current testing have shown that this is not fact. Topical products can contain high levels of paraffins and remain non-comedogenic.

References

Methotrexate: Improving safety profile
C. Grills, S. Burge
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Over the past ten years there have been 137 patient safety incidents in England associated with methotrexate prescribing. Recent reports show Australia has similar concerns. Using the valuable tool of an audit, we reviewed our departmental prescribing practices for patients with psoriasis on methotrexate. Results highlighted poor documentation that patients were receiving appropriate information sheets detailing complications of the drug. Inconsistencies between prescribers were also noted, particularly in regards to haematological monitoring. A review of the current literature and the guidelines of other leading centres was performed and consistent, evidence based guidelines were produced for the department. Such guidelines are essential in order to minimize the recognized complications of methotrexate. Recent studies highlight procollagen peptide III as a valuable adjunct for monitor-
Multiple granular cell tumours

C. Grills, J. Bowling, K. Hollowood, O. Espinosa

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A 26-year-old gentleman presented to the department complaining of a number of nodules on his upper body. These nodules did now grow or change significantly after they occurred, however, over the past eight years he continued to develop new lesions. The nodules were not itchy and the patient described no pain unless the lesions were knocked. Past medical history was unremarkable and there was no family history of similar lesions.

Physical examination revealed 15 subcutaneous nodules on the right arm, trunk and neck. The lesions were nontender and firm to palpate. They ranged in size from 0.3 to 2.0 cm in diameter. The overlying epidermis was normal.

Histology demonstrated the typical features of a granular cell tumor. The individual cells show abundant granular cytoplasm with relatively small nuclei and no nuclear prominence. There was no evidence of necrosis, cellular pleiomorphism, and no mitotic figures were seen. Immunohistochemical staining was positive for S100. Staining with CD68 was also positive, however, other melanocytic markers and smooth muscle markers were negative.

The unqualified term granular cell tumor refers to a S100-positive, CD68-positive tumor, that is thought to be closely related to Schwann cells. Granular cell change, however, can occur in a variety of lesions including those of histiocytic, fibroblastic, or smooth muscle derivation.

Malignant behaviour of granular cell tumors is rare and it may be impossible to predict histologically. Malignant tumors tend to occur in older patients and are clinically more likely to be larger, ulcerated and show a rapid increase in growth.

According to the largest published series, there are a number of histological features associated with an increased metastatic risk; mitotic rate (>2 per 10 HPF), increased nuclear atypia, high nucleocytoplasmic ratio, prominent nucleoli, spindling and necrosis. Tumors with 3 or more of these features were deemed to be malignant. Eleven of the 26 patients with tumors labeled as “malignant” developed distant metastases. None of these histological features associated with an increased metastatic risk were present in the histology of any of the four lesions excised from our patient.
Staphylococcus epidermidis: A possible role in the pustules of acne rosacea
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4 Austin Health, Melbourne, Victoria

Background: Rosacea is a common skin condition characterised by facial flushing, telangiectasia, papules and pustules. It is generally regarded as inflammatory in nature. We believe that the contributory role of bacteria in this condition needs to be revisited, particularly in view of the role of propionibacterium acnes in acne vulgaris and Pityrosporum ovale in seborrhoeic dermatitis. A preliminary study in 2005, showed no difference in the presence of p.acnes between patients with rosacea and normal patients. Topical and systemic antibiotics have been a mainstay in the treatment of rosacea.

Aims/method: We compared the bacteria isolated from the pustules of 12 patients with rosacea with the bacteria isolated from surrounding skin and the inferior eyelid margin. Cultures were grown aerobically and anaerobically. Staphylococcal and propionibacterium speciation were established.

Results: Of the twelve rosacea pustule swabs, a pure growth of staph epidermidis was isolated in seven, two showed mixed growth and three resulted in no growth. Of the skin swabs, eight produced mixed growths and four no growth at all. Of the eyelid swabs six patients yielded mixed growth, four patients no growth and two patients pure growths of staph epidermidis.

Conclusion: This preliminary study requires expansion to further assess the possible role of staph epidermidis in the pustules of acne rosacea.
Diagnosis and management of acute lipodermatosclerosis
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Lipodermatosclerosis is defined clinically as progressive induration, inflammation and pigmentation. Pathologically it is defined by excessive fibrosis of the skin and subcutaneous tissues. It is divided into acute and chronic forms. While chronic lipodermatosclerosis is generally well recognised, acute lipodermatosclerosis is rarely diagnosed. It is often mistaken for cellulitis as it is characteristically painful, erythematous and oedematous. Unlike in cellulitis, it is frequently bilateral and there are no raised markers of inflammation or fever.

We present a 55-year-old female who had been presumed to have bilateral and recurrent cellulitis. Over the last two years she had progressive leg swelling. This was in association with intermittent and worsening episodes of erythema, pain and areas of ulceration and weeping of her lower legs. Intermittent courses of antibiotics had been unsuccessful in slowing progression of these symptoms. Our patient was obese and entirely sedentary.

We felt she had acute lipodermatosclerosis secondary to chronic venous hypertension and obesity. We discuss this entity and the challenges in management.

Systemic adverse effects of topical corticosteroids
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It is well known that topical corticosteroids are absorbed. While early studies failed to demonstrate this, there is now extensive evidence of systemic pharmacologic changes induced by topical corticosteroids. While small amounts are absorbed from normal skin, dermal inflammation and diseases of the skin may substantially increase percutaneous absorption. The use of occlusive dressings increases the local effect of topical corticosteroids, but also increases percutaneous absorption.

Because of the many variables, it is difficult to predict the precise proportion of corticosteroid absorbed. There are only a few cases reported of Cushing’s syndrome in adults secondary to topical corticosteroids.

We present a case of Cushing’s syndrome secondary to long-term topical corticosteroids for psoriasis.

The current evidence of corticosteroid absorption is summarized. We then outline an approach to the anticipation, diagnosis and management of systemic side effects of topical corticosteroids.
Case report of blue pseudochromhidrosis following initiation of a proton pump inhibitor

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A 57 year old intellectually impaired man presented with a three week history of progressively darkening ashen appearance of his scalp, face and neck which coloured cotton swabs light blue when scrubbed. He had been started on a proton pump inhibitor (PPI) six weeks previously. The diagnosis of pseudochromhidrosis was made on the basis of clinico-histological features and heavy growth of invasive yeast and chromogenic bacterium Bacillus spp. (not Bacillus cereus). The discolouration improved with stopping the PPI. He did not change his skin care routine, and was prescribed no other medications.

Chromhidrosis and pseudochromhidrosis are rare. Chromhidrosis is apocrine in origin; the pigment being oxidized lipofuscin. Pseudochromhidrosis occurs when clear eccrine sweat becomes colored on the surface of the skin as a result of extrinsic dyes, paints, or chromogenic bacteria1.

The stratum corneum has an ‘acid mantle’ which is important for permeability barrier formation and cutaneous antimicrobial defense2. The origin of the acidic pH is conjectural. Passive and active influencing factors have been proposed, e.g. eccrine and sebaceous secretions as well as proton pumps. Changes in the pH are reported to play a role in the pathogenesis of skin diseases like irritant contact dermatitis, atopic dermatitis, ichthyosis, acne vulgaris and Candida albicans infections. We propose that the PPI changed the pH of the stratum corneum leading to overgrowth of yeast and bacillus spp. creating the blue colouring.

References

Response of mucosal lesions in pemphigus vulgaris to pulse versus oral conventional steroids

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Aim: To compare the response of mucosal lesions in pemphigus vulgaris (PV) to pulse versus oral conventional steroids.

Material and methods: Mucosal PV divided in 2 groups. Group 1 had pure mucosal pemphigus patients and were treated with daily oral conventional steroids. Group 2 had
patients of mucosal as well as cutaneous lesion and treated
with dexamethasone-cyclophosphamide pulse (DCP) and
oral steroids added only if DCP alone failed to control
disease. Mucosal lesions severity was graded as: Grade I (<2
oral mucosal areas and no difficulty), Grade II (>2 oral
mucosal areas and difficulty in taking solids), Grade III (>2
mucosal areas and severe eating difficulty).

Result: Group 1 had 34 patients and mean duration of
mucosal lesions was 7.5 months. Mean dose of oral pred-
nisolone to treat Grade III mucosal lesions was 28.6 mg/d
for a mean of 33.6 weeks and for grade II was 20 mg/d for
21.8 weeks. In group 2 (68 patients with mucosal lesions of
a mean duration of 4.7 months), to treat grade III lesions,
in addition to a mean of 14.1 DCPs, mean dose of 25.4 mg/d
for a mean of 28 weeks was required. Grade II lesions in
Group 2 required, in addition to mean of 10.3 DCPs, mean
dose of 15 mg of prednisolone for a mean of 21.7 weeks.
Grade I lesions in group 2 responded to DCP alone. DCP
alone failed to treat pure mucosal lesions, tried separately,
and were treated with oral prednisolone. Remissions were
more and long lasting in group 1. Relapse rate of 40% was
equal in both the groups. Mucosal lesions of moderate to
severe intensity respond only to daily oral prednisolone
with or without DCP. DCP alone can treat grade I mucosal
lesions.

Think Zinc but is it just Zinc?
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A four month old breastfed previously healthy male infant
admitted with a history of irritability, diarrhoeal illness and
periorificial rash was diagnosed with acrodermatitis
terteropathica and initiated on zinc supplements at a dose
of 1 ml twice daily after investigations. The irritability
improved after the first dose with the rash clearing in a
week of initiation of treatment.

Blood tests revealed a normal zinc level at 15 ml with a crit-
ically low valine and low isoleucine levels. So, in this infant
the zinc levels were normal but two of the three branched
chain aminoacid (leucine, isoleucine and valine) levels
were low. However, the child responded well to zinc
supplementation.

Cases of acrodermatitis enteropathica rash in children with
Maple syrup urine disease treated with diet deficient in
branched chain aminoacid are reported. These patients
had a normal zinc and low valine and isoleucine levels but
did not respond to zinc supplementation but to branched
chain aminoacid supplementation. Our patient responded
well to zinc supplements.
The anomaly between clinical response and biochemical results in our patient might be because plasma zinc represents less than 0.1% of total body zinc and hence is not a good indicator of true zinc status. Alternatively it is possible that the function of some zinc transporter proteins (ZIP genes) in skin depends on the availability of branched chain aminoacids.

Reference

An unusual vascular proliferation; Is this a variant of acquired elastotic haemangioma or a new and distinct entity?
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Background: Acquired elastotic haemangioma (AEH) is a solitary benign vascular proliferation found on exposed sites in the elderly. To our knowledge, there is only one report describing six patients with this uncommon entity. It presents as an elevated, violaceous to erythematous plaque, often mistaken for a basal cell cancer. All cases had in common severe solar damage, female sex and characteristic histology.

Objective: We report an unusual acquired vascular tumour with a clinicopathological picture that overlaps AEH, but demonstrating several unique features. This may represent a variant of AEH, or a previously undescribed vascular tumour.

Methods: Clinical, histological and immunohistochemical features of a vascular lesion on the forearm of an elderly gentleman are discussed and compared to AEH.

Results: A 72 year old male presented with a 2 year history of a solitary, asymptomatic, slowly enlarging and slightly elevated bruise-like lesion on solar damaged extensor forearm skin. The appearance of the lesion in our patient differs from the published clinical description of AEH.

Histological findings shared by AEH and our lesion include a proliferative vascular pattern on a background of solar elastosis. Notable differences included vessel size, fibrosis, erythrocyte extravasation, haemosiderin deposition and location of CD31 and CD34 staining.

Conclusion: AEH is a distinctive vascular entity. There are clinical and histological features to suggest our case may represent a variant of AEH, but if so, this is the first report in a male. Differing clinical and histological findings, however, raise the possibility this is a new and distinct acquired vascular tumour.
Skin problems in diabetes
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Diabetes is fast becoming one of the biggest health problems worldwide, and skin is the biggest organ.

In Australia up to 6% of its population of 20 million are diabetic, 85% of whom have type 2 diabetes. It is of concern that every year, another 100,000 people are diagnosed to have diabetes.

Diabetes affects multiple organs, and the skin is one of the targets. At least 30% of diabetics have skin problems. These skin problems are either idiopathic, or are attributed to well recognized pathophysiological mechanisms. However, the exact pathogenesis of some skin conditions which are accepted diabetic associations remains unknown or conjectural.

Dermatologists have an important professional duty to diagnose and treat all diabetes related dermatoses expeditiously. Serious diabetes-specific dermatoses are fortunately uncommon. Nonetheless, these skin problems can be life threatening if they are not diagnosed and treated promptly.

Skin infection due to vibrio vulnificus and calciphylaxis are ominous examples.

The clinical spectrum of diabetic dermatoses covers the following well-circumscribed areas:
- Microangiopathic dermatoses: diabetic dermopathy, necrobiosis lipoidica and disseminated granuloma annulare
- Vasculopathic dermatoses: acral erythema, ulcerations, gangrene
- Neuropathic dermatoses: pruritus, neurotrophic ulcers
- Metabolic dermatoses: haemochromatosis, xanthomas, acanthosis nigricans, PCT, “diabetesy”
- Immunological dermatoses: vitiligo, lichen planus, reactions to insulin and oral hypoglycemic agents
- Microbiological dermatoses: dermatophyte and yeast infections, and bacterial infections
- Miscellaneous dermatoses: reactive perforating collagenosis, calciphylaxis, scleredema, lipodystrophy and diabetic bullae, cutaneous reactions to insulin injections and pumps

Where appropriate, when dermatologists are performing skin checks they should ask if their patients are diabetic. During all clinical reviews, diabetologists should enquire about their patients’ skin health.

To neglect skin problems in diabetes is to forgo important opportunities of exploring new research frontiers and
achieving optimal management outcomes for our diabetic patients.

Plaque giant dermatofibroma with satellitosis
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Unusual giant dermatofibromata are reported in a 40-year-old man and a 48-year-old man, who both presented with plaques on a lower limb. The plaques were well-defined, reddish brown, indurated and 10–15 cm in diameter. Several satellite lesions were present around large plaques. Light microscopy of 3 mm punch biopsies from each patient displayed dermal proliferation of fibrohistiocytic cells, with a storiform dermal proliferation of spindle cells of bland appearance, and entrapped intervening collagen bundles. The overlying epidermis was acanthotic. These cases represent extraordinary examples of giant dermatofibroma as the lesions were not pedunculated as reported in previous cases,¹² and also exhibited the uncommon feature of satellitosis. Fewer than 20 cases of giant dermatofibroma have been reported to date, and only one has shown satellitosis and a plaque-like appearance.³

References

Linear IgA disease associated with laryngeal squamous cell carcinoma
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A 69 year old man presented with a two week history of a widespread bullous eruption. Histology confirmed linear IgA disease. An eight month history of increasing hoarseness of voice was investigated and T5 N0 squamous cell carcinoma of the larynx was diagnosed. Dapsone 50mg daily lead to prompt improvement of his skin while awaiting treatment of his laryngeal cancer with chemoradiotherapy. Following completion of chemoradiotherapy dapsone was not required and at two year follow up there is no evidence of recurrent cancer or linear IgA dermatosis. The concurrent course of this patients skin disease and cancer suggests that linear IgA disease in this patient may represent a paraneoplastic phenomenon.
Pimecrolimus 1% cream but not vehicle cream significantly improved skin atrophy in adults with head and neck atopic dermatitis who were intolerant of or dependent on topical corticosteroids

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Introduction: Pimecrolimus cream 1% is a calcineurin inhibitor that has been approved for the treatment of atopic dermatitis. This study was designed to assess the efficacy and safety of pimecrolimus in patients having atopic dermatitis (AD) on face, neck and eyelid, and who were dependent on or intolerant of topical corticosteroids. The potential of pimecrolimus to reduce skin atrophy and telangiectasia was also investigated.

Methods: This 12-week multicentre study consisted of a 6-week double-blind, randomized, vehicle-controlled, parallel-group phase, followed by a 6-week open label phase. The primary objective was to determine the efficacy of pimecrolimus cream in AD of the head and neck using the facial Investigator's Global Assessment. Effects on facial skin atrophy and telangiectasia were also explored. 200 mild to moderate head & neck AD patients were randomized into the double blind phase; 89 patients from the pimecrolimus group and 67 from the vehicle group entered the open label phase.

Results: At the end of the DB phase, 46.5% pimecrolimus patients vs. 16.2% vehicle patients were clear or almost clear of facial AD (p < 0.001). Patients with pre-existing skin atrophy had a significant reduction of skin atrophy at 6 weeks on pimecrolimus compared with patients in the vehicle group (p = 0.021).

Conclusion: The results of this study are particularly relevant to Australian adult patients with head and neck eczema as the inclusion criteria for this study are very similar to those recently approved for pimecrolimus 1% cream subsidy under the Pharmaceutical Benefits Scheme.
LBH589, a novel deacetylase inhibitor (DACi), treatment of patients with cutaneous T-cell lymphoma (CTCL). Skin gene expression profiles in the first 24 hours related to clinical response following therapy

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Background: LBH589 is a novel DACi in Phase I trials. Preclinical studies have demonstrated that DACi alter gene expression and other DACi have induced disease regression in CTCL. In this study we evaluated the safety and activity of LBH589 in CTCL and examined changes in tumor gene expression in the first 24 hours following oral LBH589.

Methods: Patients with advanced-stage CTCL, who had progressed following prior systemic therapy were entered into the oral DLT dose level 30 mg M,W,F cohort (n = 1), the subsequent MTD dose level 20 mg M,W, F weekly (n = 9). LBH589 was continued until disease progression or unacceptable toxicity. Intensive cardiac monitoring was performed. Six patients had 3 mm punch biopsies from CTCL-involved skin lesions at 0, 4, 8 and 24 hours after administration, which were subjected to gene expression profiling using Affymetrix U135 plus 2.0 GeneChips with 47,000 probesets. Alteration in gene expression patterns was confirmed by QRT-PCR of selected genes.

Results: 10 patients are currently evaluable for response. 2 of the patients attained a complete response (CR), 4 attained a partial response (PR), 1 achieved stable disease (SD) with ongoing improvement, and 2 progressed on treatment (PD) (RR = 6/10; 60%). Microarray data on 5 patients demonstrated distinct gene expression response profiles between patients. Individual gene expression within patient tumors varied over the time points in the first 24 hours following treatment. To demonstrate effects of LBH589 as an epigenetic modulator, global changes in gene expression patterns in responding versus progressing patients have been delineated. In addition, functional categories of genes which correlate with degree of patient response have been identified.

Conclusions: LBH589 induces CRs in CTCL patients. Preliminary microarray analyses of tumor samples have identified distinct gene expression profiles.
An Exophiala foot
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Mycetoma is a subcutaneous fungal or actinomycete infection presenting as deep nodules or abscesses draining characteristic granules. It is a relatively frequent presenting feature seen in tropical countries, particularly affecting rural workers who wear no footwear. It is certainly not a common presentation in Adelaide; but once seen, never forgotten.

We present an 81 year old widowed female, who lives in suburban Adelaide. She denied overseas travel in the last 7 years, but prior to that had visited various countries including Fiji and United States. She initially noticed left ankle pain for several weeks, before experiencing a deep eruptive swelling on the arch of the left foot. This became more nodular and ulcerated, discharging pus out of several sinuses. Accompanying this discharge was the extrusion of distinctive black grains – the first clue as to the aetiology of this swelling.

Biopsies were taken for histopathology and tissue culture. In addition, some of the black grains were visualised under direct microscopy. On calcofluor/KOH staining, fungal hyphae were clearly evident, supporting the presumed diagnosis of a eumycetoma.

The management of this patient enlisted the expertise of multiple specialities – dermatologists, a plastic surgeon, microbiologists and infectious disease physicians. Her treatment and progress is ongoing.

Degos disease with involvement of the gastrointestinal tract
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Degos disease, also known as malignant atrophic papulosis, is a rare disorder characterized by infarctive lesions initially in the skin. Lesions involving the gastrointestinal tract and central nervous system have a poor prognosis and high rates of mortality. We describe a case of a 75-year-old lady who presented initially with pink papules over the trunk and limbs. Over the next few weeks, the papules became unbilicated and then developed into porcelain-white lesions with a violaceous rim. Histology of one of these lesions revealed superficial and deep dermal lymphohistiocytic inflammation, mainly perivascular, with a central zone of
infarction consistent with Degos disease. Three years later, she presented with worsening abdominal pain, anaemia, raised inflammatory markers and an abdominal bruit. Angiography confirmed splanchic vessel stenosis secondary to vasculitis and she underwent successful balloon dilatation. After ten months of immunosuppressive therapy she has not had any further recurrence.

**Review on UVA1 phototherapy**

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UVA1 (340–400 nm) phototherapy was first described in 1981 as a diagnostic tool for polymorphous light eruption but has since expanded its use as a therapeutic modality for many dermatological disorders. Treatment units can be divided into low-dose (10–30 J cm$^{-2}$), medium-dose (40–70 J cm$^{-2}$) and high-dose (150 J cm$^{-2}$).

Indications for UVA1 include atopic dermatitis, systemic lupus erythematosus and generalised morphea, all of which have had demonstrated benefits in randomised controlled trials. Additionally, there have been reported non-randomised trials and case series on UVA1 in cutaneous T-cell lymphoma, systemic sclerosis, genital and extragenital lichen sclerosis et atrophicus, acute and chronic graft-versus-host disease and cutaneous mastocytosis.

The mechanisms of action of UVA1 in inflammatory skin conditions include induction of T-lymphocyte apoptosis, reduction in number of Langerhans and mast cells, and altering the Th1/Th2 balance. Clinical benefits in sclerotic conditions such as morphea and systemic sclerosis have been attributed to its deeper tissue penetration and induction of collagenase production, hence reducing the concentration of collagen deposition.

**Sporotrichoid cutaneous nodules caused by Mycobacterium abscessus Infection**

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*Mycobacterium abscessus* belongs to a group of fast-growing atypical mycobacteria. It has been reported to cause a wide range of clinical disease including cutaneous and soft tissue infections, pulmonary infections in cystic fibrosis patients, cervical lymphadenitis, keratitis and endocarditis associated with a prosthetic valve. Cutaneous lesions may mani-
fest as ulcerations, abscesses, sinuses or nodules. The sporotrichoid spread of nodules has previously been reported to occur. Treatment of cutaneous infection depends largely on the extent of the disease and the host immune status. Surgical intervention may sometimes be required. The organism is usually resistant to most traditional anti-mycobacterial agents, including tetracyclines, fluoroquinolones and sulphonamides. Hence, susceptibility testing is recommended for successful treatment.

We report a case of an otherwise healthy 46-year-old Chinese male who developed cutaneous *Mycobacterium abscessus* infection over the left forearm after contact with river water. The diagnosis was confirmed by histological and microbial evaluation. He was initially treated with doxycycline 100 mg twice a day as for presumed atypical mycobacterial infection before susceptibility results were available. The organism was sensitive to cefoxitin, amikacin, clarithromycin and linezolid. The patient declined subsequent follow up, but said that the lesions had improved when interviewed over the phone.

Reference

by mutations in the keratin genes KRT5 and KRT14. EBS has been divided into four subtypes according to the clinical severity and distribution of the lesions.

**Methods:** EBS was clinically diagnosed and confirmed by transmission electron microscopy and immunofluorescence mapping examination of a skin biopsy. Genomic DNA was extracted from peripheral blood leucocytes and mutation analysis of KRT5 and KRT14 was performed by direct sequencing in Australian patients.

**Results:** We have diagnosed 38 EBS families and screened 23 of these for KRT5 and KRT14 mutations. 8 mutations were identified in KRT14 and 5 in KRT5, and 2 cases both have mutations in KRT14 and KRT5. 12/15 cases were *de novo* mutations and 9/15 were in “hot spot” codons. In 8 cases, no mutations were found. Our results suggest a high rate of *de novo* mutations. 7/15 mutations had not been previously published when identified, including KRT14-M119T, M119V, M272T and KRT5-E168D, 429delRNKLA, D197E, G138E. Thus far, none have been used for pre-natal diagnosis.

**References**