Dermatology in the Traveller & Migrant - Dr Sara Ritchie - Jan 2014

Differential diagnostic net:
- What are the countries / geography of travel? And activities there?
- What are the potential skin conditions that can occur at this body site?
- What does the morphological appearance of the skin lesions suggest?

Tropical dermatology by country:
- Schistosomiasis (freshwater swimming) - Africa, SE Asia, Brazil & Venezuela
- Strongyloides (contaminated soil) - worldwide
- Filariasis - Africa / Asia / Pacific
- Cutaneous leishmaniasis (sandfly vector) - in many countries worldwide - not SE Asia
- CLM (contaminated sand / soil) - all tropics and subtropics
- Myiasis (botfly larvae) - all tropics and subtropics

The history:
- Countries of origin / travel, purpose of travel, areas visited eg jungle/ savannah/ beaches
- Travel contact with soil eg tree-planting
- Contact with domestic or wild animals eg bats / caves
- Swimming in fresh-water or sea-water, eg coral injuries
- Timing of onset of condition, evolution of clinical signs, symptoms in relatives, treatments already used
- PMH / DH
- Some assessment of patient's immune status

Examination:
- Macule - flat spot < 1cm
- Papule - raised lesion < 1cm
- Patch - flat area > 1cm
- Plaque - raised patch > 1cm
- Nodule - thickened lesion with a dermal component
- Blister / bullus - fluid filled lesions
- Erosion - superficial loss of dermis
- Ulcer - loss of epidermis and part of dermis

Special sites in dermatology examination:
- Scalp
- Mouth
- Nails

- Genital area

Examples of Macules & Papules:

Scabies. Extremely common after travel, particularly in backpacker hostels. Intensely itchy papules, S-shaped burrows, often in skin folds. Treatment with 5% topical Permethrin, to all family members. Severe cases may require po Ivermectin, 200mcg/kg.

Lichen Planus. Relatively common inflammatory T-cell mediated disease affecting skin, mucosa, nails. Localised disease can occur at sites of skin trauma. Treatment with potent topical steroids (extensive disease may require systemic immunosuppressants).

Secondary Syphilis. Up to 6/12 after primary infection. Maculopapular rash frequently affects palms and soles +/- fever, lymphadenopathy. EIA IgM becomes +ve by end of second week. Refer to GUM for Penicillin according to BASHH guidelines.

Guttate psoriasis. Abnormal immune reaction to Streptococcal throat infection. 10% of cases of adult psoriasis (50% of cases in children). Sometimes do get +ve ASOT (or anti-DNAaseB titre), although usually diagnose clinically. Usually resolves after 3/12, but up to 1/3 progress to chronic types of psoriasis.

Schistosomiasis. Cercarial dermatitis (Swimmer's itch) is due to penetration of skin by schistosome larvae in freshwater lakes. Endemic in Africa, China & SE Asia, Brazil & Venezuela. Itchy papules may occur within hours of infection, and resolve within 10 days. If suspected need serological screening - and stool and terminal urine - 3/12 after the last exposure.

Examples of Patches & Plaques.

Eczema. Extremely common after travel. Heat/ sweating can make eczema worse. A cold, dry environment can also make eczema worse. Post-inflammatory hyperpigmentation occurs easily in black skin. Treat with emollients + topical steroids.

Superficial fungal infection. If apparent 'eczema' not improving with initial topical steroids think of tinea. May require oral antifungals eg Terbinafine 250mg od for 2-6 weeks.

Photosensitivity. Causes include many oral drugs eg antimalarials, amiodarone, tetracyclines, sulphonamides, quinine, NSAIDS, thiazides. Also many topical agents eg sunscreens, topical NSAIDS, lime juice.

Tinea capitis. Most cases in UK due to Trichophyton tonsurans. Treat with Terbinafine po for 4 weeks: up to 20kg = 62.5mg od; 20-40kg = 125mg od; >40kg = 250mg od. Plus Nizoral shampoo twice weekly to affected child and all siblings.

Urticaria. Causes include drugs (eg Aspirin, NSAIDS, ACE inhibitors), physical urticarias (cholinergic, delayed pressure, cold, sunlight, water), Hereditary Angio-Neurotic Oedema, urticarial vasculitis. Consider serology for strongyloides in migrants from endemic areas. Investigations also TFTs, ANA, complement, ANCA, ACE, immunoglobulins. Avoid precipitating factors and treat with double dose non-sedating antihistamine for 2weeks - if no better try quadruple dose antihistamine for 4 weeks. 2/3rds of patients respond to this. (If no better consider Ranitidine / Montelukast / Refer.)

Lipodermatosclerosis. Due to chronic venous insufficiency. Clinical diagnosis with ‘inverted champagne bottle’ appearance, with dusky coloration, and fibrosis and scarring in skin and soft tissues. Treatment is with weight reduction, emollients, topical steroids, and compression hosiery.

Examples of Nodules

Tungiasis. Due to burrowing sandflea Tunga penetrans - penetrates soft skin, usually on toe web spaces. Found in central & S America, Africa, Indian subcontinent. Superimposed infection can cause impetigo, ecthyma, or cellulitis. Treat by application of vaseline and later removal with sterile needle, or curettage or surgical excision.

Myiasis. Several flies in tropics in larval maggot stage capable of colonizing human skin (direct deposition of eggs, or via contaminated soil or clothes, or via other insect vectors). Clinical diagnosis - may cause secondary infection. Treatment is surgical removal after vaseline to suffocate the larva.

Nodular prurigo. Often from insect bites, although patients may not remember being bitten unless they have multiple bites. Itch leads to scratching, which can cause persistent prurigo. Treat with antihistamines, greasy emollients, and potent or very potent topical steroids.

Deep fungal infection. With single large skin nodules in migrants consider malignancy if rapidly growing, or also unusual infection if slowly progressive. If suspected will need referral for specialist treatment.

Examples of Ulcers

Pyogenic infection is common. Ecthyma after travel may be due to staph / strep - consider a 2w course of a Penicillin or Macrolide. If unresponsive however consider referral - will need biopsies to investigate for more unusual organisms.

Leg ulcers. Aetiology includes infection, vascular insufficiency, vasculitis, pyoderma gangrenosum, malignancy. Travellers may have increased periods of sun exposure, and the travelling population now often comprise older patients, so remember to consider malignancy.

Specific Patterns

Cutaneous Larva Migrans (CLM). Common worldwide, from skin contact with sand or soil contaminated with hookworm larvae. Humans are accidental hosts - larvae migrate slowly in epidermis until they die. Treat with Albendazole 400-800mg od for 3 days, or Ivermectin 200mcg/ kg stat dose.

Erythema Chronicum Migrans. Due to borrelia spirochaetes from infected Tick bite - cause of Lyme disease at temperate latitudes. Serology can take 8/52 to become +ve, but rash usually appears within 4/52 of infectious bite. Treat on presumptive clinical diagnosis of characteristic rash with history of tick bite. Doxycycline 100mg bd for 2/52.

Examples of Disorders of Pigmentation

Idiopathic guttate hypomelanosis. Normal part of ageing process over age 40. Commoner in women, Gradual reduction in number of melanocytes (thought to be similar process to greying of hair).

Pityriasis versicolor. Due to overgrowth of commensal Malassezia yeasts. Clinical diagnosis (culture of scrapings often negative). More common in hot, humid climates, or in context of sweating. Treat with selenium sulphide shampoo topically as body wash (leave overnight for 3 nights + repeat after 1/12), or topical azole eg Nizoral shampoo. For extensive or persistent disease oral Itraconazole 200mg od for 7 days.

Follicular eczema. Atopic eczema in black skin often occurs in an extensor distribution, and has a follicular appearance with papules centred around hair follicles. Scratching can cause areas of post-inflammatory hypopigmentation. Treatment is as for atopic eczema.

Acne. In black skin acne is more prone to scarring, with post-inflammatory hyperpigmentation +/- keloid scars. Topical retinoids can be even more irritant - use Adapalene rather than Isotrex, and start twice weekly and increase slowly. Azaleic acid may also be less irritant than other topical agents. Consider systemic therapy with Roaccutane earlier to reduce pigmentation / keloidal scarring.

Vitiligo. Prevalence up to 1% of population - can occur in all races. Check autoimmune blood screen - higher risk of diabetes, thyroid disease, pernicious anaemia, Addison's disease. For new patches can try Dermovate for *one month only* - thereafter can try topical Tacrolimus. Phototherapy - about 1/3rd improve, 1/3rd partial response, 1/3rd no response.

Discoid lupus erythematosus. Differential may include sarcoid or cutaneous TB. Confirm on biopsy. Chronic scaly plaques with dyspigmentation on sun-exposed sites. May cause scarring alopecia. Treatment is with topical steroids or oral antimalarials. Risk of subsequent SLE approx 5% - annual ANA.