# ELDERLY (65 YEARS AND OVER)

'Have you not a moist eye, a dry hand, a yellow cheek, a white beard, a decreasing leg, an increasing belly?' — Shakespeare, King Henry IV



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Ageing inexorably affects everyone, and the skin is not exempt from the process. Certain skin diseases are much more common in the elderly, while others occur at any age but tend to be more severe or atypical in this age group, with degenerative changes masking rashes and lesions that otherwise would have been easily diagnosable.

## **ASTEATOTIC ECZEMA**

This form of dermatitis, caused by extremely dry skin, is very common in older individuals, and starts on the shins with dry, cracked, fissured itchy skin. Sometimes the cracks are painful and bleed. The condition is also called eczema craquelé (Fig. 1). The rash can become generalised. Treatment is with aqueous cream, emulsifying ointment, urea-containing creams, or one of a host of proprietary creams and lotions. Mild soaps or soap substitutes like emulsifying ointment should be considered, and moderately potent steroid ointments like betamethasone valerate (Betnovate, Persivate, Lenovate), hydrocortisone butyrate (Locoid lipocream), mometasone (Elocon) and methylprednisolone aceponate (Advantan) are usually needed as well.



Fig. 1. Asteatotic eczema.

## **CHONDRODERMATITIS NODULARIS HELICIS**

This degenerative condition of the ear presents with a painful and/or tender nodule on the helix (or antihelix) of one ear, the symptoms usually most apparent when sleeping on that side. The top of the helix is the commonest site in men, and the antihelix in women. Examination shows an erythematous papule or nodule with overlying ulceration or crust (Fig. 2). The condition is benign, and treatment is only



Fig. 2. Chondrodermatitis nodularis helicis.

indicated for symptom relief. Initially, potent topical steroid creams can be tried together with pressure-relieving pillows. In most cases, however, this will not be sufficient, and alternatives include curettage and/or electrodesiccation, elliptical excision, or excision of the affected cartilage alone. The latter technique has the lowest recurrence rate. Sometimes chondrodermatitis nodularis mimics a neoplasm like a basal cell carcinoma (BCC), and a biopsy is then indicated. Solar keratosis is also common on the rim of the ear.

Chronic actinic dermatitis seems to be one of several photosensitive HIV-related dermatoses, and then occurs at a younger age than typical chronic actinic dermatitis

The commonest autoimmune blistering disease in the elderly is pemphigoid.

# **CHRONIC ACTINIC DERMATITIS**

This condition has an insidious onset with severe itching in sun-exposed sites like the face, neck, V of the chest, forearms and hands, particularly in men. Persistent scratching causes eczematous changes and lichenification, and the condition can closely simulate an endogenous eczema like seborrhoeic dermatitis (Fig. 3). Only brief sun exposure is required to trigger the condition. The cause is unknown. Specific phototesting will show a low MED (minimal erythema dose) to UVB, and a skin biopsy should be performed to exclude conditions like lupus erythematosus.



Fig. 3. Chronic actinic dermatitis.

Treatment is difficult and initially includes extreme sun avoidance. Sunscreens usually do not help. Potent topical steroid ointments are used liberally, together with antibiotics for secondary infection. Inadequate response should prompt a trial of immunosuppressants like azathioprine or cyclosporin. Chronic actinic dermatitis seems to be one of several photosensitive HIV-related dermatoses, and then occurs at a younger age than typical chronic actinic dermatitis.

#### **CUTANEOUS HORN**

This horny excrescence is a source of much embarrassment and usually occurs on sun-exposed sites like the face, forearms and hands. It grows very slowly and the tip often breaks off on its own, but then recurs (Fig. 4). The base will often show an erythematous, slightly indurated papule. The cause is commonly a solar keratosis. Other causes include viral warts, seborrhoeic keratosis, squamous cell carcinoma (SCC) or BCC. Treatment is with curettage and electrodesiccation, or excision.



Fig. 4. Cutaneous horn.

#### **ERYTHRODERMA**

When virtually the entire skin is reddened the term erythroderma is employed; redness and scaling denote exfoliative dermatitis, and the conditions are usually seen together. Erythroderma can originate from a widespread dermatosis such as eczema, psoriasis, drug eruption or mycosis fungoides, but quite often no cause is apparent, especially in older men (Fig. 5). The condition is extremely unpleasant and itchy, and complications like septicaemia, dehydration, protein loss, hypothermia and cardiac

failure can occur. Hospitalisation is usually recommended. A detailed drug history should be obtained, and a skin biopsy performed together with appropriate blood tests and imaging.



Fig. 5. Erythroderma.

A form of mycosis fungoides, without pre-existing patches and plaques, causes erythroderma and is termed Sézary syndrome. Primary or idiopathic erythroderma responds poorly to treatment and becomes a progressive and debilitating condition.

# HYPERTROPHIC SOLAR **KERATOSIS**

If solar keratoses are not treated they often enlarge to form so-called hypertrophic solar keratoses, particularly on the scalp and legs (Fig. 6). These scaling nodules with an erythematous base are almost indistinguishable from early SCC, and curettage with electrodesiccation, or excision, are preferred modalities of treatment. If liquid nitrogen or 5-fluorouracil ointment (Efudix) is tried, the lesions should be carefully followed up to make sure they disappear. In persons with very extensive hypertrophic solar keratoses and of advanced age, it might be prudent to remove only the larger or most suspicious lesions.



Fig. 6. Hypertrophic solar keratosis.

#### **ONYCHOLYSIS**

When the nail plate lifts off the nail bed a whitened area is created, usually at the distal margin (Fig. 7). This change is called onycholysis, and is often erroneously attributed to fungal infection. Although the latter can cause onycholysis, in persons of advanced age it is probably not the predominant cause. Onycholysis also occurs with trauma, ischaemia, eczema, psoriasis, lichen planus, diabetes, thyroid disease, frequent immersion in water, extensive use of nail varnish, and many drugs. Treatment is taraeted at the cause, and if onvchomycosis is suspected this is best confirmed with a nail scraping.



Fig. 7. Onycholysis.

#### **PEMPHIGOID**

The commonest auto-immune blistering disease in the elderly is pemphigoid, also termed bullous pemphigoid. This intensely itchy disorder often starts with urticarial plaques of unusual shape, and the diagnosis is usually missed at this stage. Later large tense bullae occur, predominantly on the limbs (Fig. 8). Oral involvement is unusual, unlike pemphigus.



Fig. 8. Pemphigoid.

Pemphigoid is best confirmed with skin biopsy and immunofluorescence testing. The cause is unknown, but many drugs have been implicated. Treatment with moderate doses of oral steroids is needed in all but the mildest cases: prednisone 40 - 60 mg daily for several months, and then gradually tapered, is a common regimen. Some cases respond very well to dapsone 100 mg daily, and this can be an excellent steroid-sparing agent. Tetracyclines with nicotinamide have also been used with success. Pemphigoid generally has a favourable prognosis, the disease burning out in a few years.

# **PRIMARY CUTANEOUS B-CELL LYMPHOMA**

Cutaneous B-cell lymphoma is being seen with increasing frequency in older people. The presentation is usually that of asymptomatic reddish to purple nodules and plaques at a localised site such as the scalp or leg (Fig. 9). It is important to distinguish the condition from nodal B-cell lymphomas that have metastasised to the skin. Primary cutaneous B-cell lymphoma is diagnosed with biopsy, and staging done with appropriate investigations like imaging and lymph node biopsy. Treatment modalities include chemotherapy, radiotherapy and surgery. Prognosis depends on the histological type and stage of disease, but is generally excellent.



Fig. 9. Cutaneous B-cell lymphoma.

#### **PRURITUS**

Severe generalised itching is a common and distressing problem in older people. Often no cause can be found, and the doctor has to resort to symptomatic treatment only. Of the myriad causes the first to exclude is an actual dermatosis like eczema, psoriasis, scabies or mycosis fungoides. In these cases a suggestive rash is usually present, and a biopsy can be very helpful. When there is no actual rash, but just signs of scratching, or no skin lesions at all, the term 'generalised pruritus' is appropriate. Elucidating the cause can be difficult, but conditions to consider include drugs (virtually any drug can cause pruritus without a rash), dry skin, cholestasis, chronic renal failure, iron deficiency anaemia, polycythaemia, mastocytosis, primary biliary cirrhosis, myxoedema, lymphoma, leukaemia and a host of other malignancies. Investigations for these disorders, where practical, would be prudent

Treatment would be targeted at the cause, but if none is found, symptomatic treatment with moisturisers, topical steroid ointments and antihistamines is indicated. Dry skin is probably the predominant cause of pruritus in the elderly, and entails the frequent use of moisturisers. These should all be used immediately after bathing, as this traps water in the skin, and should be used in large quantities. Bathing should be limited to once a day using only mild soaps. Sedating antihistamines like hydroxyzine and promethazine can be tried, but should be used with caution because of sideeffects. Tricyclic antidepressants like amitriptyline and dothiepin in low doses are often more effective than plain antihistamines. As a last resort, UVB phototherapy can be used for intractable pruritus of virtually any origin. This would be done at a dedicated phototherapy clinic.

#### **SCABIES**

In a debilitated elderly patient scabies can easily be missed and the infestation is most common in institutions, old age homes and hospitals, and can spread quickly. As mentioned before, pruritus is a ubiquitous symptom in the elderly, and scabies should always be considered. On examination the typical lesions might be masked by extensive scratchina, but one must look for burrows, erythematous papules, urticaria, vesicles and pustules. Large blisters can also occur, mimicking pemphigoid. (See article on infants for the principles of treatment — pp. 493 - 495.) The itch of scabies resolves very slowly, even with successful killing of the mites.

### **SOLAR COMEDONES**

Sun-induced changes in dermal collagen and elastic can disrupt facial hair follicles to cause large blackheads and whiteheads, the so-called solar comedones. Some can become inflamed as in acne. The condition is most noticeable on the outer cheeks, in areas of maximal solar elastosis. Optimal treatment seems to be with expression of the comedones. Retinoid creams like Renova, Differin and Retin-A might be preventive.

#### **SOLAR PURPURA**

Atrophy of dermal collagen and other connective tissues supporting dermal blood vessels causes rupture of these vessels with the slightest trauma. The resulting superficial bleed or purpura can be unexpectedly large and frightening, forming an irregular purplish patch (Fig. 10). Sometimes the overlying skin splits off, forming an unpleasant skin tear. Both biological ageing and photoageing contribute to this common phenomenon, which can be aggravated by steroids, aspirin and warfarin. No effective therapy is available, but some success has been reported with high doses of vitamin C.



Fig. 10. Solar purpura.

# **SQUAMOUS CELL CARCINOMA (SCC)**

Slowly growing infiltrated nodules with overlying scale, crust or ulceration and rolled edges are characteristic of cutaneous SCC, the second commonest skin malignancy after BCC. Most develop from pre-existing solar keratoses or Bowen's disease, and these have a lower tendency to metastasise than SCCs of non-actinic origin. Treatment of small lesions is with curettage and electrodesiccation, or with excision. Large lesions might need radiotherapy, sometimes combined with chemotherapy. SCC of the lip is a more serious lesion than SCC of sundamaged skin, as it tends to metastasise more often (Fig. 11). Likewise SCC from a previous injury, burn or ulcer (Marjolin's ulcer) is a serious lesion. People on chronic immunosuppression, such as renal transplant recipients, and albinos tend to develop numerous SCCs.



Fig. 11. Squamous cell carcinoma —

## ZOSTER

Zoster or shingles represents reactivation of the varicella-zoster virus after chickenpox and usually occurs many decades later. A prodrome with fever, headache and malaise is followed by pain, tingling and numbness in the area supplied by the infected nerve root, i.e. the affected dermatome. The symptoms at this stage are often attributed to other causes, depending on

the site. Later erythema, weals, vesicles and bullae develop on the site. and the diagnosis can usually be made with ease (Fig. 12).



Fig. 12. Zoster.

Treatment with any of the available anti-herpes antivirals should be instituted as soon as possible, as these can shorten the duration of the acute illness, and help to prevent post-herpetic neuralgia. Higher doses are used than for herpes simplex virus infections, and include the following: aciclovir (Zovirax, Lovire and many other generics) 800 mg 5 times daily (i.e. 4hourly) for 1 week; valaciclovir (Zelitrex) 1 g tds for 1 week; famciclovir (Famvir) 250 mg tds for 1 week. The dosage shoud be reduced by half in the presence of significant renal dysfunction. Antibiotics are used for secondary infection, either topically or orally. Analgesics like paracetamol are also used, and a short pulse of oral steroids may be helpful for pain. Zoster involving the eye should be assessed by an ophthalmologist. Postherpetic neuralgia is very difficult to treat, and amitriptyline is most widely used.