ABC of Dermatology

P K BUXTON

RASHES WITH EPIDERMAL CHANGES—II

Pityriasis rosea

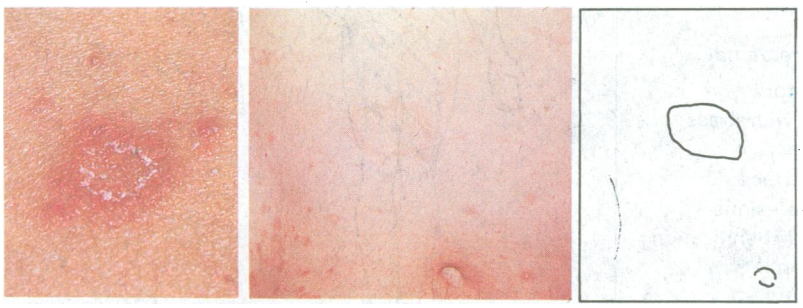
Lichen planus Seborrhoeic dermatitis
Pityriasis rosea **Pityriasis lichenoides** **Localised lesions**

The word "pityriasis" is from the Greek for bran, and the fine bran like scales on the surface are a characteristic feature. The numerous pale pink oval or round patches can be confused with psoriasis or discoid eczema. The history helps since this condition develops as an acute eruption and the patient can often point to a simple initial lesion—the herald patch.

There is commonly slight itching. Pityriasis rosea occurs mainly in the second and third decade, often during the winter months. "Clusters" of cases occur but not true epidemics. This suggests an infective basis. There may be prodromal symptoms with malaise, fever, or lymphadenopathy. Numerous causes have been suggested from allergy to fungi; the current favourite is a virus infection.

The typical patient is an adolescent or young adult, who is often more than a little concerned about the sudden appearance of a widespread rash. The lesions are widely distributed, often following skin creases, and concentrated on the trunk with scattered lesions on the limbs. The face and scalp may be affected.

Early lesions are red with fine scales—usually 1-4 cm in diameter. The initial herald patch is larger and may be confused with a fungal infection. Subsequently the widespread eruption develops in a matter of days or, rarely, weeks. As time goes by the lesions clear to give a grey pigmentation with a collarette of scales facing towards the centre.



Herald lesions.

Clinical features of psoriasis	*Clinical features of eczema*
Possible family history	Possible family history
Sometimes related to stress	Sometimes worse with stress
Itching—rare	Usually itching
Extensor surfaces and trunk	Flexor surfaces and face
Well defined, raised lesions	Poorly demarcated lesions
Hyperkeratosis	Oedema, vesicles, lichenification
Scaling, bleeding points beneath scales	Secondary infection sometimes present
Köbner phenomenon	
Nails affected	
Scalp affected	
Mucous membranes not affected	

Similar rashes

Discoid eczema presents with itching and lesions with erythema, oedema, and crusting rather than scaling. Vesicles may be present. The rash persists unchanged.

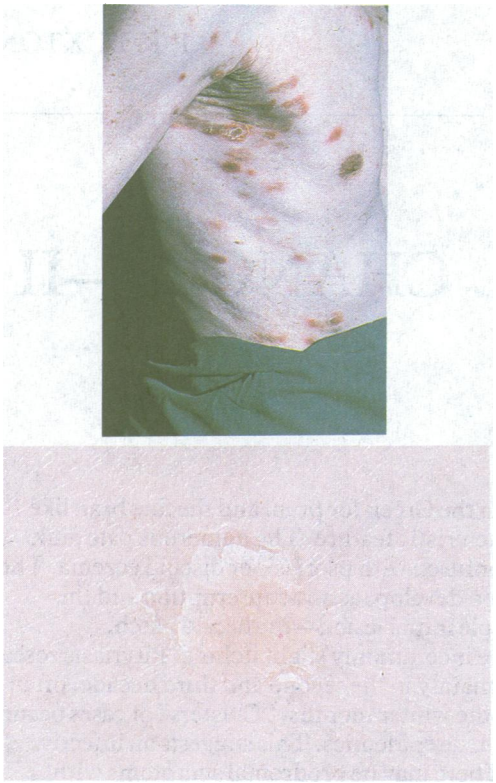
A *drug eruption* can sometimes produce similar lesions.

Guttate psoriasis—The lesions are more sharply defined and smaller (0·5-1·0 cm) and have waxy scales.

The pathology of pityriasis rosea

Histological changes are non-specific, showing slight inflammatory changes in the dermis, oedema, and slight hyperkeratosis.

Pityriasis lichenoides



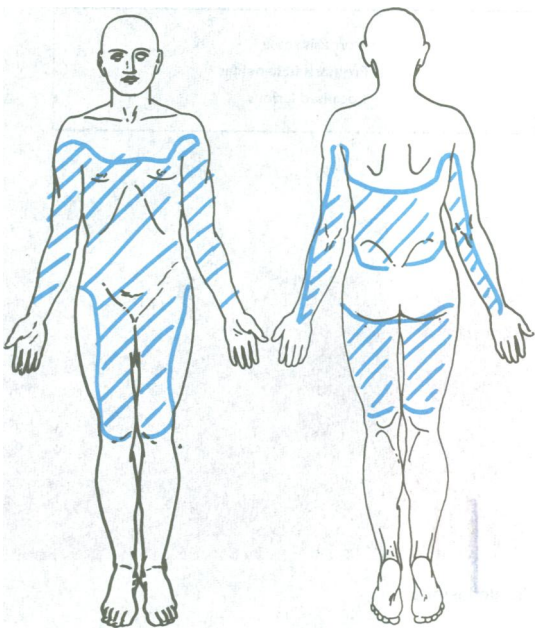
Pityriasis lichenoides is a less common condition occurring in acute and chronic forms.

The *acute* form presents with widespread pink papules which itch and form crusts, sometimes with vesicle formation suggestive of chickenpox. There may be ulceration. The lesions may develop in crops and resolve over a matter of weeks.

The *chronic* form presents as reddish brown papules—often with a "mica" like scale that reveals a smooth, red surface underneath, unlike the bleeding points of psoriasis. In lichen planus there is no superficial scale and blistering is unusual.

The distribution is over the trunk, thighs, and arms, usually sparing the face and scalp.

The underlying pathology—vascular dilatation and a lymphocytic infiltrate with a keratotic scale—is in keeping with the clinical appearance. The cause is unknown. Treatment is with topical steroids.



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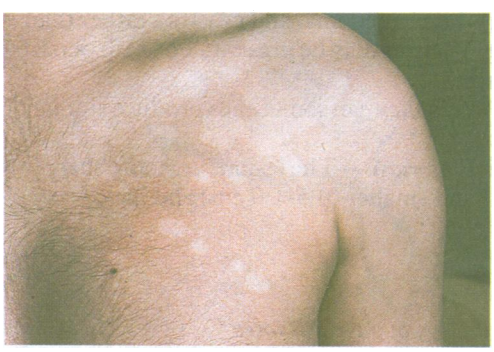
Pityriasis versicolor

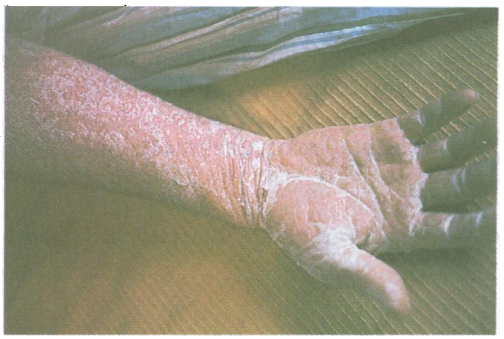


Pityriasis versicolor is a skin eruption that usually develops after sun exposure with white macules on the tanned skin but pale brown patches on the covered areas—hence the name—versicolor, or variable colour. The lesions are: (*a*) flat; (*b*) only *partially* depigmented—areas of vitiligo are totally white; and (*c*) do not show inflammation or vesicles.

The causative organism is a yeast—*Pityrosporum orbiculare*—that takes advantage of some unknown change in the epidermis and develops a proliferative, stubby, mycelial form—called malassezia furfur. This otherwise incidental information can be simply put to practical use by taking a superficial scraping from a lesion on to a microscope slide—add a drop of potassium hydroxide or water with a coverslip. The organisms are readily seen under the microscope: spherical yeast forms and mycelial rods, resembling "grapes and bananas" ("spaghetti and meatballs" in the United States).

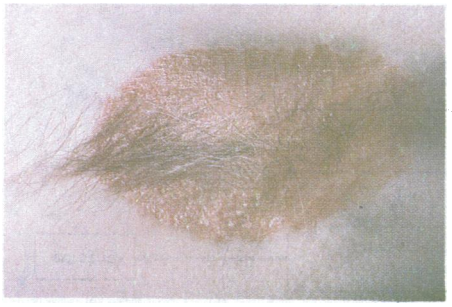
Treatment is simple: selenium sulphide shampoo applied regularly with ample water while showering or bathing will clear the infection. The colour change may take some time to clear. Expensive antifungal preparations are not usually needed.

Desquamating stage of generalised erythema

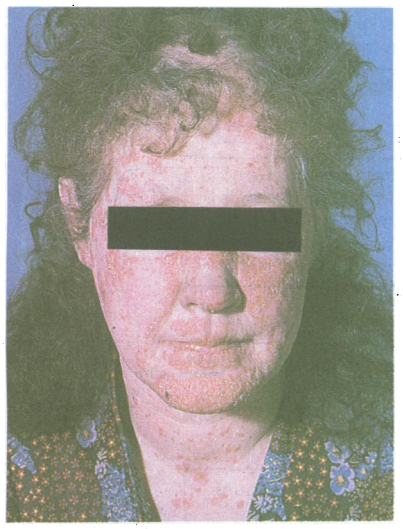


Any extensive acute erythema, from the erythroderma of psoriasis to a penicillin rash, commonly shows a stage of shedding large flakes of skin—desquamation—as it resolves. If only this stage is seen it can be confused with psoriasis.

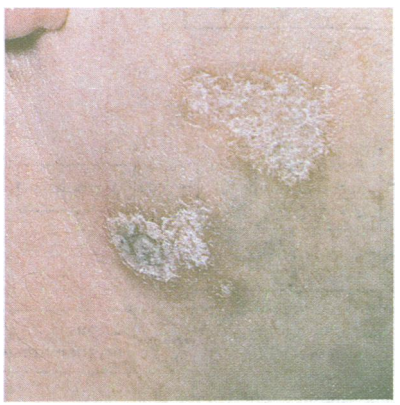
Localised lesions with epidermal changes



Flexural seborrhoeic dermatitis.



Systemic lupus erythematosus.



Discoid lupus erythematosus.

Psoriasis, seborrhoeic dermatitis, atopic eczema, and contact dermatitis can all present with localised lesions.

Psoriasis may affect only the flexures, occur as genital lesion, or affect only the palms. The lack of itching and epidermal changes with a sharp edge help in differentiation from infective or infiltrative lesions.

Seborrhoeic dermatitis can occur in the axillae or scalp with no lesions of other areas.

Atopic eczema—The "classical" sites in children—flexures of the elbows and knees and the face—may be modified to localised vesicular lesions on the hands and feet in older patients. Some atopic adults develop severe, persistent generalised eczematous changes.

Contact dermatitis is usually localised, by definition, to the areas in contact with irritant or allergen. Wide areas can be affected in reactions to clothing or washing powder, and sometimes the reaction extends beyond the site of contact.

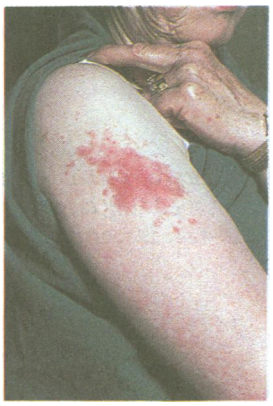
Fungal infections—Apart from athlete's foot, toenail infections, and tinea cruris (in men) "ringworm" is in fact not nearly as common as is supposed. The damp, soggy, itching skin of athlete's foot is well known. An itching, red diffuse rash in the groin differentiates tinea cruris from psoriasis. However, a bacterial infection, erythrasma, may be confused with seborrhoeic dermatitis and psoriasis—skin scrapings can be taken for culture of *Corynebacterium minutissimum* or, more simply, green/blue fluorescence shown with Woods light. The scaling macules from dog and cat ringworm (*Microsporum canis*) itch greatly while the indurated pustular, boggy lesion (kerion) of the cattle ringworm is quite distinctive.

Fungal infection of the axillae is rare; a red rash here is more likely to be due to erythrasma or seborrhoeic dermatitis.

Tinea cruris is very unusual before puberty and is uncommon in women.

In all cases of suspected fungal infection skin scrapings should be taken on to black paper, in which they can be folded and sent to the laboratory. In some units special "kits" are provided, which contain folded black paper and Sellotape strips on slides for taking a superficial layer of epidermis.

Lupus erythematosus—There are two forms of this condition: *discoid*, which is generally limited to the skin, and *systemic*, in which the skin changes are associated with disease of the kidneys and other organs. The acute, erythematous rash on the malar area of the face, usually in a woman, is characteristic of the systemic type. In discoid lupus erythematosus there are well defined lesions, which are a combination of atrophy and hyperkeratosis of the follicles, giving a "nutmeg grater" feel. It occurs predominantly on the face or areas exposed to the sun as chronic, erythematous lesions that are much worse in the summer months.



Fixed drug eruption.

Fixed drug eruptions—Generalised drug eruptions are considered under erythema, but there is a localised form recurring every time the drug is used. There is usually a well defined, erythematous plaque, sometimes with vesicles. Crusting, scaling, and pigmentation occur as the lesion heals. It is usually found on the limbs, and more than one lesion can occur.

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