# ABC of Dermatology

P K BUXTON

# BLISTERS AND PUSTULES

## Development, duration, and distribution

**The differential diagnosis of blistering eruptions**

***Widespread blisters***

*Eczema*—Lichenification and crusting, itching
*Dermatitis herpetiformis*—Itching, extensor surface, persistent
*Chickenpox*—Crops of blisters, self limiting, prodromal illness
*Erythema multiforme*—erythematous and "target" lesions, mucous membranes affected
*Pemphigoid*—Older patients, trunk and flexures affected. Preceding erythematous lesions, deeply situated, tense blisters
*Pemphigus*—Adults, widespread superficial blisters, mucous membranes affected (erosions)
*Drug eruptions*—History of drugs prescribed, overdose (barbiturates, tranquillisers)

***Localised blisters***

*Eczema*—"Pompholyx" blisters on hands and feet, itching
*Psoriasis*—Deep, sterile, non-itching blisters on palms and soles
*Impetigo*—Usually localised, staphylococci and streptococci isolated
*Herpes simplex*—Itching lesions developing turbid blisters

| Itching | Non-itching | |
|---|---|---|
| Eczema-pompholyx on hands and feet | Pustular psoriasis of hands and feet | Bullous impetigo |
| Dermatitis herpetiformis | Pemphigus vulgaris | Erythema multiforme |
| Chickenpox | Bullous pemphigus | Insect bite allergy |

Several diseases may present with blisters or pustules. There is no common condition that can be used as a "reference point" with which less usual lesions can be compared as rashes can be compared with psoriasis. A different approach is needed for the assessment of blistering or pustular lesions, based on the history and appearance and summarised as the three Ds: development, duration, and distribution.

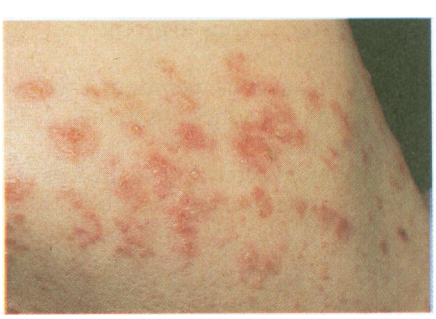
*Development*—Was there any preceding systemic illness—as in chickenpox, hand, foot, and mouth disease, and other viral infections? Was there a preceding area of erythema—as in herpes simplex or phemphigoid? Is the appearance of the lesions associated with itching—as in herpes simplex, dermatitis herpetiformis, and eczematous vesicles on the hands and feet?

*Duration*—Some acute blistering arises rapidly—for example, in allergic reactions, impetigo, erythema multiforme, and pemphigus. Other blisters have a more gradual onset and follow a chronic course—as in dermatitis herpetiformis, pityriasis lichenoides, and the bullae of porphyria cutanea tarda. The rare genetic disorder epidemolysis bullosa is present from, or soon after, birth.

*Distribution*—The distribution of blistering rashes helps considerably in making a clinical diagnosis. The most common patterns of those that have a fairly constant distribution are shown.

*Itching* is a very useful symptom. If all the accessible lesions are scratched and it is hard to find an intact blister it is probably an itching rash.

## Clinical features: widespread blisters



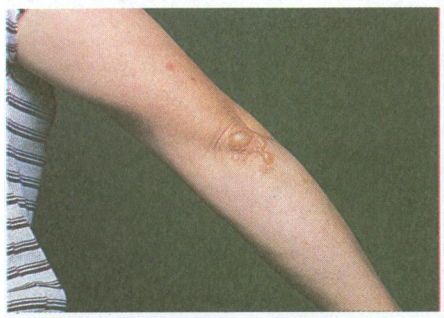
Dermatitis herpetiformis.

*Chickenpox*

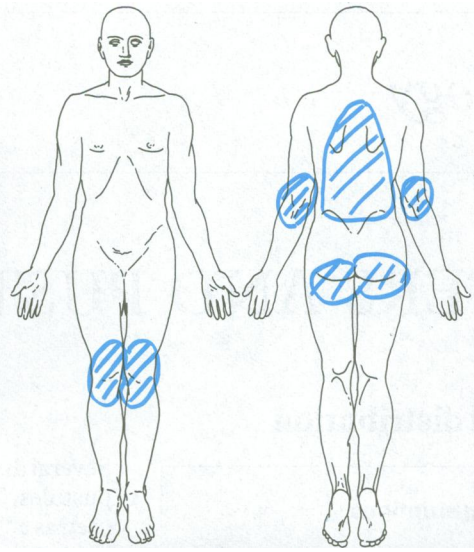
Chickenpox is so well known in general practice that it is rarely seen in hospital clinics and is sometimes not recognised. The prodromal illness lasts one to two days and is followed by erythematous lesions that rapidly develop vesicles, then pustules, followed by crusts in two to three days. Crops of lesions develop at the same sites—usually on the trunk, face, scalp, and limbs. The oral mucosa may be affected. The condition is usually benign.

*Dermatitis herpetiformis*

Dermatitis herpetiformis occurs in early and middle adult life and is characterised by symmetrical, intensely itching vesicles on the trunk and extensor surfaces. The vesicles are superficial. The onset is gradual, but may occur rapidly. The distribution is shown in the diagram on the next page.

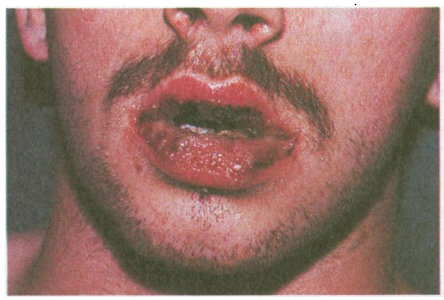


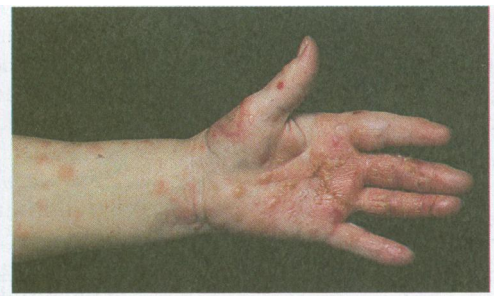
Dermatitis herpetiformis.



*Variants* of dermatitis herpetiformis are larger blisters, forming bullae, and erythematous papules and vesicles.

*Associated conditions*—Coeliac disease with villus atrophy and gluten intolerance may occur in association with dermatitis herpetiformis. Linear IgA disease is a more severe, widespread disease, in which there are "linear" deposits of IgA along the basement membrane of the epidermis and not only at the tips of the papillae as in dermatitis herpetiformis. Treatment is with Dapsone or sulphapyridine together with a gluten free diet.

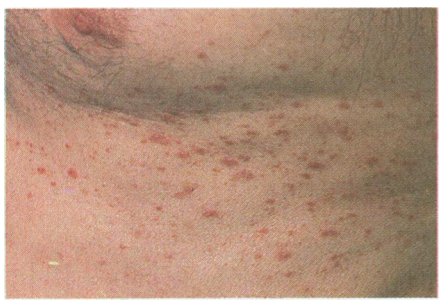




Erythema multiforme.

*Erythema multiforme with blisters*

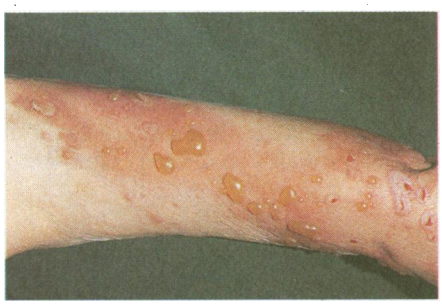
Blistering can occur on the lesions of erythema multiforme to a variable degree; when severe, generalised, and affecting the mucous membranes it is known as Stevens Johnson syndrome. The typical erythematous maculopapular changes develop over one to two days with a large blister (bulla) developing in the centre of the target lesions. In severe progressive cases there is extensive disease of the mouth, eyes, genitalia, and respiratory tract. The blisters are subepidermal—that is, deep—although some basement membrane remains on the floor of the blister.



Pityriasis lichenoides.

*Pityriasis lichenoides varioliformis acuta*

As the name implies, lichenified papules are the main feature of pityriasis lichenoides varioliformis acuta (or Mucha-Habermann's disease), but vesicles occur in the acute form. Crops of pink papules develop centrally, with vesicles, necrosis, and scales—resembling those of chickenpox, hence the "varioliformis." There is considerable variation in the clinical picture, and a prodromal illness may occur. The condition may last from six weeks to six months. No infective agent has been isolated. The pathological changes parallel the clinical appearance with inflammation around the blood vessels and oedema within the dermis.



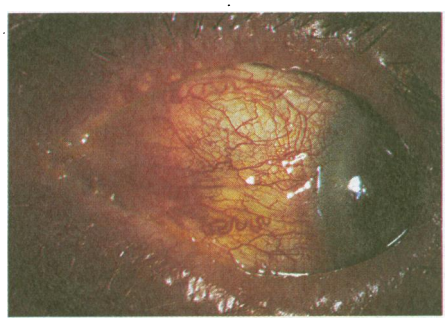
Bullous pemphigoid.

*Pemphigoid*

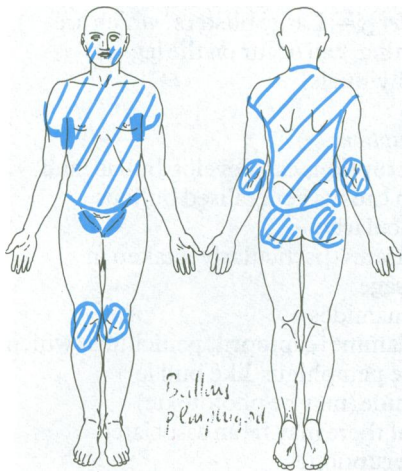
The bullous type of pemphigoid is a disease of the elderly in which tense bullae develop rapidly, often over a preceding erythematous rash, as well as on normal skin. The flexural aspects of the limbs and trunk are mainly affected. The bullae are subepidermal and persistent, with antibodies deposited at the dermoepidermal junction. Unlike pemphigus, there is a tendency for the condition to remit after many months. Treatment is with corticosteroids by mouth, 40 to 60 mg daily in most patients, although higher doses are required by some. Azathioprine aids remission, with reduced steroid requirements, but takes some weeks to produce an effect. Topical steroids can be used on developing lesions.

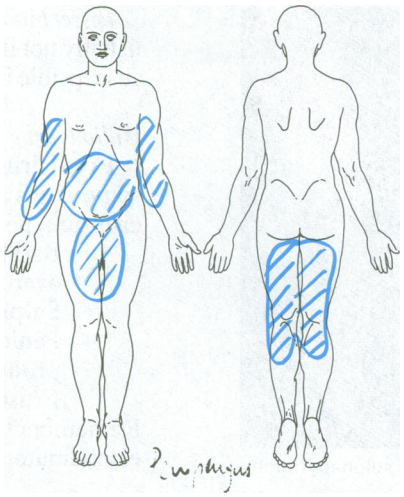
Chronic scarring pemphigoid affects the mucous membranes with small bullae that break down, leading to erosions and adhesions in the conjunctivae, mouth, pharynx, and genitalia.

There is also a localised type of pemphigoid occurring on the legs of elderly women that runs a benign self limiting course.



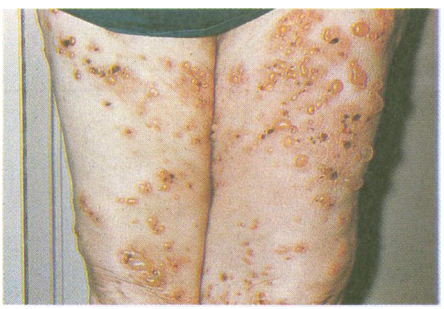
Mucous membrane pemphigoid.



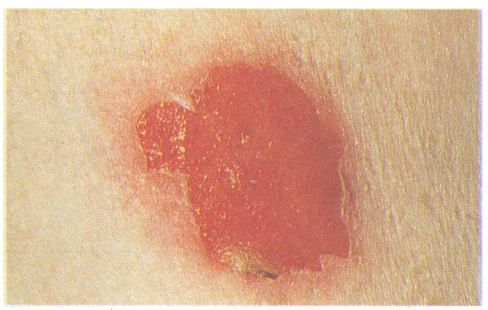


*Pemphigus*

The most common form of pemphigus vulgaris is a chronic progressive condition with widespread superficial bullae arising in normal skin. In about half of the cases this is preceded by blisters and erosions in the mouth. The bullae are easily broken, and even rubbing apparently normal skin causes the superficial epidermis to slough off (Nikolsky sign). These changes are associated with the deposition of immunoglobulin in the epidermal intercellular spaces. It is a serious condition with high morbidity despite treatment with steroids and azathioprine.



Pemphigus vulgaris.



Nikolsky sign.

**Ulcers in the mouth**

Differential diagnosis:

Trauma (dentures)

Aphthous ulcers

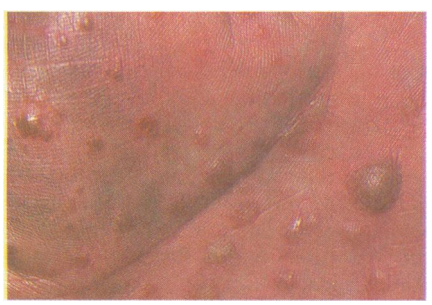
Candida albicans infection

Herpes simplex

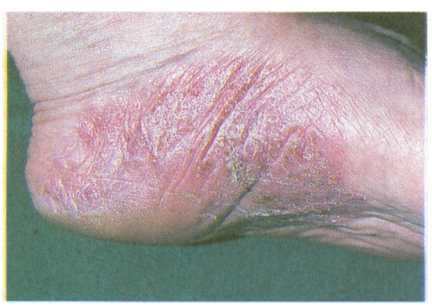
Erythema multiforme (from drugs)

Pemphigus

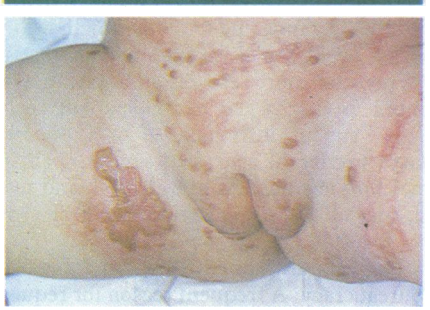
## Clinical features: localised blisters



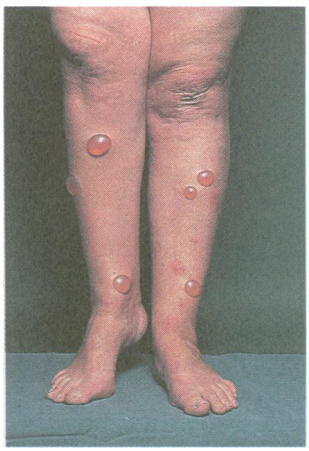
*Pomphylox*—which means "a bubble"—is characterised by persistent, itchy, clear blisters on the fingers, which may extend to the palms, with larger blisters. The feet may be affected. Secondary infection leads to turbid vesicle fluid.



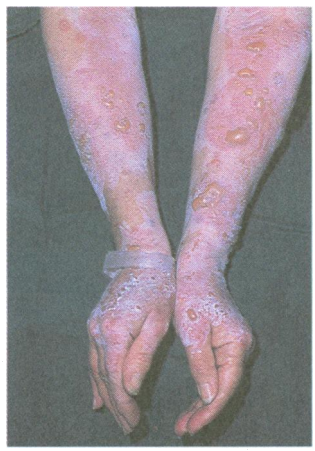
*Pustular psoriasis* is characterised by deep seated sterile blisters, often with no sign of psoriasis elsewhere—hence the term palmopustular pustulosis.



*Bullous impetigo* is seen in young children. Staphylococci are usually isolated.



Insect bite allergy.



Drug reaction to sulphapyridine.

*Insect bite allergy*—Large blisters, which are usually not itching, can occur on the legs of susceptible individuals.

*Bullous drug eruptions*

Fixed drug eruptions can develop bullae, and some drugs can cause a generalised bullous eruption, particularly:

Barbiturates (particularly if taken in overdosage)
Sulphonamides
Penicillamine (captopril, penicillins (which produce pemphigus-like bullae))
Frusemide (may be phototoxic)

Remember that there may be an associated erythematous eruption.

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# *Medicolegal*

## Consent to treatment and criminal responsibility in the mentally ill

CLARE DYER

With more and more people surviving into their 80s and 90s inevitably more will be suffering from dementia in their later years. A decision by the High Court last month should make it easier for elderly people whose mental powers are declining to arrange for someone they trust to handle their affairs on their behalf. The two cases, referred to the High Court by the Court of Protection,[1,2] highlight a common problem for the families of elderly people whose faculties are dimmed by age: by the time it occurs to the family that some means of managing the aged relative's property and affairs may be necessary his or her mental capacity may already be in doubt.

### Problems of power of attorney

Until last year, when the Enduring Powers of Attorney Act 1985 came into force, the problem was much more acute. Previously a power of attorney entered into when the donor of the power was in full possession of his faculties was automatically revoked if he later became mentally incapable, leaving the attorney without any authority to act. So just when the power was most needed it became worthless, and relatives had to resort to the more cumbersome and costly procedure of having a receiver appointed by the Court of Protection. The enduring power of attorney was introduced to deal with this problem by allowing a person, while he still had the capacity, to give a power of attorney to someone of his choice to take over the management of his affairs either straight away or in the event that he later became incapacitated. Notwithstanding the incapacity, the power remained in force as long as the donor had had the capacity when he entered into it.

The question that arose in the two cases that went to the High Court was: if a person is already incapable of managing his affairs can he still have the legal capacity to enter into a power of attorney? In both the cases the master of the Court of Protection found that, although the donors were incapable of managing their own affairs, they were able to understand what an enduring power of attorney was and that the relatives who were given the power were to be their attorneys under an enduring power of attorney. The master referred the question of the validity of the power to the court. Mr Justice Hoffman ruled that a person may validly create an enduring power of attorney even if he is already incapable of managing his property and affairs by reason of mental disorder. It is necessary only that he understands the nature and effect of the power when he creates it.

The decision was welcomed at last month's symposium organised by the British Medical Association and the British Academy of Forensic Sciences on mental health and legal capacity, which, in a wide ranging debate, also tackled the issues of consent to treatment and criminal responsibility. The morning session, which dealt with the civil law, was chaired by Mrs A B McFarlane, master of the Court of Protection. When the court receives an application for a receiver to be appointed or discharged (if the patient recovers mental capacity, which happens infrequently) or if there is a question of testamentary capacity the court may send a psychiatrist, one of the Lord Chancellor's medical visitors, to visit and make a report. Dr E F Carr, one of the six part time medical visitors, outlined their work.

They were, he said, the eyes and ears of the court, helping to put a more human face on bureaucracy. A frequent reason for requesting

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CLARE DYER, BA, BLS, legal correspondent