Bullous pemphigoid

1. Bullous pemphigoid

> Joan just about coped living alone. She had early dementia. One of the most difficult things for her was remembering her medication, and this was a particular problem when it came to her skin condition – bullous pemphigoid. She was feisty. She was happy for her family to remind her to take her tablets but she absolutely did not want them helping her to apply creams. But she forgot. And her skin looked terrible. The itch stopped her from sleeping.

This article was updated in May 2023.

This is rare but serious. Let's consider how we would spot it and what we should do. This was the subject of a clinical update in the BMJ which incorporates guidance from the British Association of Dermatology (BMJ 2017;357:j2169).

Bullous pemphigoid facts and stats

- *Bullous pemphigoid is the most common autoimmune blistering skin disease.*
- *It has an incidence of 4 cases per 100 000 patients per year (which makes it a fairly rare event in primary care).*
- *It is on the rise because it is a disease of old age, with a mean onset of 80y.*

1.1. Aetiology

- Poorly understood.
- Possible triggers include trauma, furosemide, NSAIDs and antibiotics.
- There is an association with neurological diseases including dementia, cerebrovascular disease and Parkinson's disease with the neurological disease appearing first. This is not fully understood.

1.2. How do we spot it?

The peak age of onset is 80y; it is very rare below the age of 50 (*if you see a blistering skin condition in a younger patient (40–60y), this may be pemphigus vulgaris, which is rarer – blisters tend to be flaccid*).

It is pretty dramatic in appearance (see link below for images):

- Initially, may be intensely itchy lesions which may mimic eczema.
- Tense blisters (bullae) appear on limbs and trunk – the underlying skin can be normal or inflamed.
- Lesions may be single or widespread.
- Blisters or erosions can appear in the mouth or on the genitals.

- It is usually itchy.

1.3. Diagnosis

If we suspect a case, we should refer urgently to dermatology. If the disease is widespread, we should discuss on the same day by telephone – dermatology may wish to admit or start oral steroids.

Diagnosis is by biopsy and direct immunofluorescence.

1.4. Management and prognosis

It is a self-limiting condition but may last months to years. While it is active, it is really unpleasant for affected individuals, and contributes significantly to morbidity and even mortality in some cases.

- If a drug trigger is suspected, stop the offending drug as this may reduce the risk of relapse.

Choice of treatment depends on the severity of the disease and fragility of the patient. These will be initiated in secondary care.

Treatment success is defined as no new lesions forming and old lesions starting to heal – this usually starts to occur after 2w of treatment.

The mainstay of treatment is corticosteroids, either topical (usually ultra-potent) or systemic.

- Prednisolone (remember PPI/bone protection). The British Association of Dermatology guidance emphasises the potential harms of systemic steroids and suggests the following initial doses, which can usually start

to reduce after 2–4w:

- 0.3mg/kg for mild or localised disease.
- 0.75mg/kg for moderate disease.
- 1mg/kg for severe disease, defined in one study as >10 new blisters per day (BJD 2012:167;1200).

Other options include:

- Immunosuppressants, e.g. azathioprine, dapsone, methotrexate, are a second-line option if oral steroids fail or to enable doses to be reduced.
- Anti-inflammatory antibiotics.

Topical steroids are the safest treatment and offer the best balance of disease control and safety. But there are obvious practical issues for frail, elderly patients applying ultra-potent steroid all over their body on a daily basis. There is an excess mortality in those who have systemic steroids.

For this reason, there has been increased interest in other options. A recent, small, imperfect UK and German non-inferiority RCT compared doxycycline with oral prednisolone (Lancet 2017;389:1630). All participants were also allowed to use topical steroid for symptom relief.

Non-inferiority studies are odd – they let the researchers decide what constitutes a 'non-inferior response'. Prior to the study, they knew that doxycycline would be less good than prednisolone and so, providing it was no more than 37% less good, it would be deemed 'non-inferior'. It was only 18% less good. *Yes… I know… confusing!*

The authors concluded that oral doxycycline 200mg daily offered acceptable blister control, with 74% of trial participants experiencing a significant improvement at 6w. Serious adverse events were much more common in the steroid group.

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- If you think a patient has it, refer to dermatology for biopsy and confirmation – call to discuss!
- Ultra-potent topical steroids offer the best balance of disease control and safety, but can be difficult practically.
- Oral steroids carry high risk of harms.
- Oral doxycycline is an increasingly evidence-based option, and may be used at the beginning alongside topical steroids.

Useful resources:

Websites (all resources are hyperlinked for ease of use in Red Whale Knowledge)

- Dermnet NZ - bullous pemphigoid images

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