Pruritus

Introduction

- Pruritus can cause discomfort, frustration, poor sleep, anxiety and depression. Itch may be localised or due to systemic disease. Pruritus in systemic disease is often worse at night.
- Some causes of pruritus are independent of histamine (uraemic pruritus), therefore antihistamine medication is often ineffective.
- Persistent scratching, and the ‘itch-scratch-itch’ cycle, leads to skin damage, excoriation and thickening.
- Patients with itch usually have dry skin.
- Most medication can cause pruritic rash.

Assessment

Take a careful patient history:

- offer skin examination looking for local and systemic causes as the cause may be multifactorial
- primary skin disease (for example atopic dermatitis, contact dermatitis or psoriasis)
- infection – candidiasis, lice, scabies, fungal infection
- consider medication – opioids in particular codeine, morphine and diamorphine, selective serotonin re-uptake inhibitors (SSRIs), ace inhibitors, statins, chemotherapeutic drugs, cytokines and monoclonal antibodies (refer to specific drug information)
- consider investigations (full blood count, ferritin, c-reactive protein, urea and electrolytes, liver function tests, bone profile, thyroid function tests, blood glucose and chest X-ray)
- Systemic diseases that can cause itch include:
  - cholestatic jaundice
  - chronic kidney disease
  - thyroid disease
  - hepatoma
  - leukaemia
  - mycosis fungoides
  - paraneoplastic
  - iron deficiency +/-anaemia
  - hepatitis
  - lymphoma
  - diabetes
  - primary biliary cirrhosis
  - multiple myeloma
  - polycythaemia.
Management¹

General advice

- Where possible treatment should be cause specific.
- Treat underlying cause(s). Review medication to exclude a drug reaction.
- Use an emollient liberally and frequently as a moisturiser.
- Add an emollient to bath water and use emollient as a soap substitute (refer to local guidelines). All emollients improve dry skin which consequently improves itch. Some emollients contain specific antipruritic agents (refer to topical agents below).
- Consider a sedating antihistamine, such as hydroxyzine 25mg at night, if confident that the pruritic pathway is activated by histamine or if sleep disturbance remains despite other antipruritic measures.

Non pharmacological management

- UVB phototherapy may help in uraemic pruritus.
- Biliary stenting may relieve symptoms in cholestatic jaundice.

Pharmacological management – for systemic disease

The following table contains medication that may be recommended by a specialist. Please seek advice before initiating treatment.

<table>
<thead>
<tr>
<th>Cause</th>
<th>Treatment 1st line</th>
<th>2nd line</th>
<th>3rd line</th>
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</thead>
<tbody>
<tr>
<td><strong>Cholestasis</strong></td>
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<tr>
<td>In cholestasis there is no evidence of one drug being more effective than another so the choice will depend on individual circumstances and local guidance</td>
<td>† Rifampicin 300mg to 600mg once daily</td>
<td>N/A</td>
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<td></td>
<td>† Sertraline 50mg to 100mg once daily</td>
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<td></td>
<td>† Cholestyramine 4g up to four times daily</td>
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<td><strong>Uraemia</strong></td>
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<td></td>
<td>† Gabapentin 100mg to 300mg daily - caution as accumulates in renal impairment Dose and/or frequency may need adjustment</td>
<td>† Naltrexone 50mg daily</td>
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<tr>
<td></td>
<td>† Mirtazapine 15mg to 45mg daily - caution as accumulates in renal impairment and doses as low as 7.5mg may be suitable</td>
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</tbody>
</table>

¹ † Indicates this use is off licence  
² Indicates this medication is associated with QT prolongation
**Lymphoma**
- Prednisolone 10mg to 20mg three times daily
- Cimetidine 400mg twice daily
- Mirtazapine 15mg to 30mg at bedtime

**Systemic opioid-induced pruritus**
- Chlorphenamine 4mg to 12mg (if benefit 4mg three times daily)
- If no benefit switch opioid
- Ondansetron 8mg twice daily

**Paraneoplastic**
- Paroxetine 5mg to 20mg once daily
- Mirtazapine 15mg to 30mg at bedtime

**Unknown**
- Chlorphenamine 4mg to 12mg (if benefit 4mg three times daily)
- Paroxetine 5mg to 20mg once daily
- Mirtazapine 7.5mg to 15mg at bedtime

**Topical agents**
- Emollients or emollient with active ingredient (for example menthol 1%).
- Crotamiton 10% cream (for example Eurax) or capsaicin (0.025%) cream for localised itch.
- Topical corticosteroid (mild to moderate potency) apply sparingly once daily for 2 to 3 days if the area is inflamed but not infected. Review after 7 days.
- Lidocaine patches, review benefit after 3 days.
- Be aware of the risk of fire when using emollients containing paraffin (refer to MHRA update).

**Practice points**
- Avoid topical antihistamines as they can cause allergic contact dermatitis.
- Systemic treatment is often unnecessary if skin care improves symptoms.
- Reserve systemic medication for patients who have persistent symptoms despite topical therapy.
- Avoid vasodilators such as caffeine, alcohol, spices and hot water.
- Ointments are better at relieving dry skin than creams or lotions, but take longer to be absorbed into the skin and may not be as well tolerated.

**Resources**
- Macmillan: Managing symptoms.
References


