# Scabies

# BASHH UK Guideline 2025

### **1. New or frequently overlooked points**

* **Drug‑supply & cost:** intermittent UK shortages of *both* permethrin cream and ivermectin tablets since 2023; ivermectin is usually the more expensive option – factor availability & price into regimen choice.
* **Application technique is examinable:** head/neck **must** be treated in everyone ≥ 65 y or immunocompromised; clip nails, lift rings, apply to cool dry skin and leave permethrin 12 h (re‑apply to any area washed within that window) – most adults need 30 g but up to 60 g may be required.
* **Ivermectin pearls:** give **two 200 µg kg‑1 doses** (Day 1 & 8–15), round **up** to nearest 3 mg tablet, take **with food** to ↑ bioavailability; seek pharmacy advice if weight > 120 kg (doses may exceed SmPC limit).
* **Post‑scabetic itch is common** (median 52 d) – counsel patients, treat with emollient ± crotamiton, avoid repeated scabicides.

### **2. Biology & epidemiology (high‑yield facts)**

* Sarcoptes scabiei var. hominis:
* fertilised female burrows in stratum corneum,
* lays 1–3 eggs day‑1;
* life‑cycle 10–15 d.
* Mites survive ≤ 36 h off‑host at 21 °C, longer in cool humid environments.
* Transmission is prolonged skin‑to‑skin; fomites matter mainly in crusted scabies.

### **3. Clinical spectrum & risk groups**

|  |  |  |
| --- | --- | --- |
| **Variant** | **Key features** | **Exam pointers** |
| **Classical** | Nocturnal pruritus, excoriated papules & burrows (hands, wrists, genitalia, peri‑umbilical) | Back usually spared; head only in infants. |
| **Crusted** | Hyperkeratotic malodorous plaques, minimal itch, huge mite load | Risks: immunosuppression, elderly, neuro‑disability, Down syndrome; sepsis risk high. |
| **Nail** | Dystrophic nails | Always mention in viva when rash atypical. |
| **Bullous** | tense bullae in elderly |  |
| **Incognito** | steroid‑modified rash |  |

### **4. Differential diagnosis – memorise common traps**

* **Classical:** impetigo, folliculitis, papular urticaria, atopic/contact dermatitis, dermatitis herpetiformis, psoriasis, pityriasis rosea, secondary syphilis, lymphoma/pseudolymphoma (nodular lesions).
* **Crusted:** psoriasis, eczema, Darier, pityriasis rubra pilaris, keratoderma, cutaneous T‑cell lymphoma.

### **5. Complications to quote**

* Secondary bacterial infection (impetigo → GN, ecthyma, abscess),
* post‑scabetic eczema,
* glomerulonephritis,
* leukocytoclastic vasculitis, sleep‑disturbing pruritus;
* sepsis common in crusted disease.

### **6. Diagnosis – three‑tier IACS 2020 (A/B/C) + tests**

* Confirmed = mite/egg/scybala on microscopy, dermoscopy (“delta‑wing” sign) or high‑power imaging.
* Clinical = burrow **OR** typical genital papules **OR** typical rash + ≥ 2 history items (itch/contact).
* Suspected = typical rash + 1 history item **OR** atypical rash + 2 history items.
* Ancillary: adhesive‑tape microscopy, burrow‑ink test, dermoscopy, PCR/ELISA (research). Sensitivity 46–90 %; specificity ~100 %.

### **7. Management framework**

#### **7.1 General / infection‑control advice**

* Treat **all household, sexual & care contacts** within 24 h; use same regimen and second dose 7–14 d later.
* Fomite decontamination:
  + wash ≥ 50 °C × 35 min **OR**
  + tumble‑dry high heat 10–35 min OR
  + seal non‑washables 4 d at room temp OR
  + freeze < ‑10 °C ≥ 5 h.
* Avoid sex/close contact until 24 h after first treatment & cleaning done. Provide BAD/PCDS leaflets.

#### **7.2 First‑line regimens (classical scabies)**

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| --- | --- | --- | --- |
| **Drug** | **Dose & schedule** | **Practical pearls** | **GRADE** |
| **Permethrin 5 % cream** | Whole‑body incl. neck, face, scalp, nails; 12 h; repeat Day 8–15 | Apply on cool skin, re‑apply after washing, up to 60 g; assistance for back. | 1A |
| **Ivermectin PO 200 µg kg‑1** | Day 1 & 8 (≤ 15); round up to 3 mg tabs; take with food | Licensed ≥ 15 kg; non‑ovicidal ⇒ second dose vital; safe up to 120 mg in trials. | 1A |

Both regimens show similar efficacy in network meta‑analysis.

#### **7.3 Alternatives**

* **Malathion 0.5 % aqueous** – Day 1 & 8; 24 h contact time (Grade 1D).
* **Benzyl‑benzoate 25 %** – two consecutive nightly applications; irritant; unlicensed UK (Grade 2B).
* Topical ivermectin 1 %, sulphur 5 %, spinosad 0.9 % – limited evidence only.

#### **7.4 Crusted scabies**

Combine oral ivermectin (3/5/7‑dose schedule) **plus** topical permethrin (daily or alt‑day) **±** keratolytic; decontaminate environment thoroughly; manage secondary sepsis aggressively.

#### **7.5 Special situations**

* **Pregnancy / breastfeeding:** avoid ivermectin; use permethrin first‑line, malathion second.
* **HIV:** treat as immunocompetent unless crusted.
* **Heavy weight (>120 kg):** linear PK but consider expert dosing advice.

### **8. Reactions, follow‑up & treatment failure**

* **Adverse events:** permethrin – transient paraesthesia; ivermectin – neuro AE rare (overall AE 5 % vs 4 %).
* **Follow‑up:** face‑to‑face review at 4–6 w to check cure & reinforce hygiene. New burrows ≥ 7 d post‑treatment ⇒ retreat.
* **Post‑scabetic itch:** persists > 4 w in 1/3; treat with emollient, crotamiton, potent steroid, sedating antihistamine; refer stubborn nodules.
* **Treatment failure algorithm:** exclude mis‑diagnosis, poor application, reinfestation, immunosuppression; consider supervised combination therapy (ivermectin + permethrin/malathion/BB) for genuine failure.

### **9. Public‑health & audit essentials**

* Notify **UK HSA Health Protection Team** if ≥ 2 linked cases in a closed setting within 8 w; mass, co‑ordinated treatment is key.
* **Audit standards (95 %):** (i) correct diagnostic code, (ii) two‑dose first‑line regimen, (iii) written patient info, (iv) STI screen if sexual transmission suspected.

### **10. Research & exam talking points**

* No standard definition of treatment failure – need better outcome measures & PCR diagnostics.
* Drug‑resistance remains unproven clinically, but lab markers emerging; mention in viva.

### **11. Exam‑day memory hooks**

* **“P‑I‑2‑14”** – Permethrin or Ivermectin; always **2** doses **7–14 d** apart.
* **“50 for 50”** – 50 °C for 35 min kills mites/eggs.
* **“Head & neck in > 65 y”** – don’t forget scalp coverage.
* **Post‑itch lasts “52 d”** – counsel patients.
* Quote IACS criteria & adhesive‑tape microscopy for OSPE.

Use this streamlined yet comprehensive crib‑sheet for quick recall in FRCPath Part 2 viva/written stations. Good luck!