Australian STI Management Guidelines for Use in Primary Care

Ectoparasites

Overview

- The most common genital and pubic ectoparasite infestations are scabies and pubic lice (Pediculosis pubis or crabs).
- Scabies is associated with crowded living and sleeping conditions and institutional outbreaks have been reported.
- Pubic lice is found typically in sexually active young people.

Cause

- Pubic lice is caused by *Pthirus pubis.*
- Scabies is caused by *Sarcoptes scabiei var hominis.*

Clinical presentation

Symptoms
Pubic or genital itch (especially at night with scabies) and/or rash
Scabies: genital (penile, scrotal, vulval) papulonodule
Crabs: debris in underwear
Complications
Scabies: complications uncommon and mostly in crusted scabies • Fever (children) • Pain on movement • Sleep disturbance • Secondary infection
Pubic lice: fever, lethargy, irritability (more common in the young and frail)

See STI Atlas for more images.

Special considerations

Scabies

- Clinical signs are due to allergy to bites by the mite.
- Close, prolonged (15-20 min) skin contact, person-to-person transmission.
- Fomite transmission possible.
- May survive > 3 days off host in tropics but < 36hours usually.

Pubic lice

- Transmitted by close body contact.
- Survive less than 24 hours off host.
- Fomite transmission plays little role.
- Not a vector for other diseases.

Diagnosis

Test	Site/Specimen
Pubic lice (crabs) Direct visualisation +/- magnification of crab or eggs (nits)	Adult lice infest strong hairs (pubic hair, trunk, chest and buttock; rarely eyebrows and eyelashes) Eggs (nits) are strongly attached to the hairs
Scabies Usually a clinical diagnosis. A dermatoscope/magnifying glass can aid diagnosis. Multiple methods requiring moderate degree of skill and equipment. Not usually practical in general practice.	Characteristic nodule and silvery skin burrows sometimes seen e.g. nodule on glans penis and scrotum concurrently, labial fold nodule, burrows (inter-digital folds, wrists and elbows, around breast nipples in women)

Investigations

Pubic lice (crabs): usually a clinical diagnosis with or without the aid of a magnifying glass.

Scabies: not generally available in general practice, seek specialist advice.

Specimen collection

Scabies: skin scraping taken from burrows with a fine needle to reveal the mite after examination under light microscopy.

Management

Principal treatment option		
Situation	**Recommended**	**Alternative**
Scabies	Apply permethrin cream 5% topically to dry skin from the neck down, especially hands and genitalia, and under the nails with a nailbrush. Leave on the skin for a minimum of 8 hours (usually overnight) and reapply to hands if they are washed. The time may be increased to 24 hours if there has been a treatment failure. Repeat treatment in 1 week to improve success rate.	Apply benzyl benzoate 25% emulsion topically to dry skin from the neck down, paying particular attention to hands and genitalia, and under the nails with a nailbrush. Leave on for 24 hours and reapply to hands if they are washed. Repeat treatment in 7 days.
Pubic lice	Apply pyrethrin 0.165% + piperonyl butoxide 1.65% topical foam to pubic and other hair infested with lice and wash off after 10 minutes. Repeat treatment in 1 week.	

Crusted scabies (formerly called Norwegian scabies) occurs when the mite population is very high due to poor host immune response, such as in people with HIV infection, and also in people living in remote Aboriginal and Torres Strait Island communities. Seek specialist advice for treatment.

Treatment advice

Scabies:

- Avoid close body contact.
- Patient and recent partner/s should complete treatment.
- Apply cream at night, including finger webs and do not wash hands after applying cream.
- Isolate clothes, towels and bed linen from previous 3 days and launder as usual the day after first treatment. Or simply isolate these items for > 1 week while mites die.
- Avoid more than 2 applications of treatment to prevent persistent irritation.
- Symptoms and signs may not clear for 2 weeks.

- Antipruritic treatments (antihistamine oral medication; calamine lotion and topical steroid creams e.g. hydrocortisone 1%) can be helpful.

Pubic lice:

- Isolate clothes, towels and bed linen from previous 3 days and launder as usual the day after first treatment.
- Shaving pubic hair and removal of eggs is not required.
- Compared with head lice, resistance to permethrin treatment of pubic lice has not been demonstrated.

Other immediate management

- Advise no sexual contact for **7 days** after treatment is commenced, or until the course is completed and symptoms resolved, whichever is later.
- Contact tracing.
- Provide patient with factsheet (Scabies, Pubic Lice).

Special Treatment Situations

Special considerations:

Consider seeking specialist advice before treating any complicated or persisting presentation.

Situation	Recommended
Complicated or disseminated infection	For less severe crusted scabies, use: Ivermectin 200mcg/kg PO on days 1, and second dose between day 8-14. An additional dose maybe required for moderate –severe scabies but seek specialist advice. If secondary bacterial infection (impetigo) is severe, pre-treat with antibiotics to cover *S. aureus* and/or *S. pyogenes* before administering antiscabetic treatment.
Persistent infection	Ivermectin 200 mcg/kg PO on days 1 and 8-14, not before 4 weeks after failure of both topical permethrin and benzyl benzoate.
Pregnancy	Permethrin is safe in pregnancy and during breast feeding.
Allergy to principal treatment choice	Seek specialist advice.

Regional and remote	No special differences. Scabies may affect entire small remote communities where a whole community treatment regimen may be required. Seek local advice.
Eye lash infestation	Ophthalmic-grade petrolatum ointment bd for 10 days (prescription needed and compounding pharmacist to make).

Contact Tracing

Scabies: simultaneous treatment of sexual contacts and all household members of the past month.

Pubic lice: simultaneous treatment of recent sexual contacts and all household members.

Follow Up

Review in **1 week** provides an opportunity to:

- Confirm patient adherence with treatment and assess for symptom resolution
- Confirm contact tracing procedures have been undertaken or offer more contact tracing support
- Educate about condom use, contraception, HIV PrEP/PEP, safe injecting practices, consent, CST and vaccinations for HAV, HBV and HPV as indicated.

Test of cure

Not required.

Retesting

Not required but provides an opportunity to consider testing for other STIs, if not undertaken at first presentation, or retesting post the window period.

Special considerations

If itch and rash persist, reassurance and antipruritic treatment (as above) may be helpful.

Auditable Outcomes

- 100% of diagnoses of pubic lice are treated with pyrethrin 0.165% + piperonyl butoxide 1.65% and 100 % of people with scabies are treated with permethrin 5% as first-line therapy.

Endorsement: These guidelines have been endorsed by the Blood Borne Viruses and Sexually Transmitted Infections Standing Committee (BBVSS).

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