

Donovanosis

Overview

- Donovanosis is a rare cause of genital ulceration but should be considered in patients returning from areas where the disease may be endemic e.g. PNG, Southern Africa, India and parts of South America.
- Primarily sexually transmissible but may be transmitted vertically and by casual contact.
- Incident cases were found as recently as mid 2000s in northern and tropical Australia among [Aboriginal and Torres Strait Islander people](#), but it is now very rare in these areas.
- In non-healing [genital lesions](#), carcinoma needs to be considered.

Cause

- *Klebsiella granulomatis*

Clinical presentation

Symptoms

- Relatively painless [anogenital ulceration](#)
- Lesions may be:
 - ulcerative: shallow ulcers which bleed on contact
 - proliferative: raised lesions with a beefy appearance
 - ulcero-proliferative: a combination of the two
- Lesions may involve the genitals, perineum and perianal area.
- Secondary anaerobic bacterial infection may result in offensive odour in association with the primary lesions.

Complications

- Extra-genital disease is uncommon but may occur via auto-inoculation, contiguous spread (e.g. uterus, fallopian tubes) or haematogenous spread (e.g. long bones, psoas muscle).
- Chronic, untreated ulcers may lead to lymphatic destruction with subsequent pseudo-elephantiasis of genitalia.
- Neoplastic transformation is possible.
- Increase in human immunodeficiency virus ([HIV](#)) transmission risk.
- Vertical transmission to neonate during vaginal delivery.

See [STI Atlas](#) for images.

Diagnosis

Site/Specimen	Test	Consideration
Dry swab or punch biopsy of lesions	NAAT	Highly sensitive and specific but only available in Pathwest laboratories in WA and the Molecular Diagnostics Unit at Royal Brisbane and Women's Hospital. Discuss with your laboratory before sending specimen
Punch biopsy of lesion	Histology	Low-to-moderate sensitivity but highly specific; requires experienced histopathologist as classic Donovan bodies may be sparse. Biopsy if any concern about malignant change.

NAAT – Nucleic acid amplification test

Specimen collection guidance

[Clinician collected](#) | [Self-collection](#)

Investigations: Extra-genital disease should be considered in patients with current genital infection and in patients with a past history of donovanosis who present with unusual symptoms.

Management

Principal treatment option

Situation	Recommended	Alternative
Anogenital lesions	Azithromycin 500 mg PO, daily for 7 days OR Azithromycin 1 g PO, once weekly for at least 4 weeks, until complete resolution of lesions	Doxycycline 100 mg PO, BD for a minimum of 4 weeks, until complete resolution of lesions

BD: twice daily

PO: orally

Treatment advice

- Azithromycin is highly effective and well tolerated.
- Seek specialist advice before treating this rare condition.
- Adherence to treatment is essential to ensure cure, consider directly-observed therapy.

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.

- Advise no sex with partners from the last **6 months** until the partners have been reviewed and treated if necessary.
- Contact tracing.
- Provide patient with [factsheet](#).
- Notify the state or territory health department.

Special Treatment Situations

Special considerations

- Neonates born to a mother with untreated donovanosis at time of delivery should be followed closely for the development of lesions.
- Patients may require hospital admission if adherence to treatment is poor or disseminated disease present.
- Many guidelines recommend treating with azithromycin until lesions have completely healed but there is no evidence that longer treatment is beneficial. Non-azithromycin regimens should be continued until complete resolution of lesions.

Situation	Recommended
Complicated or disseminated infection	May require prolonged treatment
Pregnant people	Azithromycin is the recommended treatment
Allergy to principal treatment choice	See alternative treatment option above.

Contact Tracing

Contact tracing of sexual partners in last **6 months** is recommended but yield is low.

See [Australasian Contact Tracing Manual](#) for more information.

Follow Up

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

- Confirm patient adherence with treatment and assess for symptom resolution
- Confirm contact tracing has 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

- Relapse and re-infection can occur and patients should be reviewed at completion of treatment course and at **3 months**
- Recurrence of lesions may represent development of skin cancer in previous lesions and requires biopsy.

Retesting

Not required but provides the opportunity to retest, post the window period, for [other STIs](#), if not undertaken at first presentation.

Auditable Outcomes

100% of diagnoses are notified to the state or territory health departments.