



MULTI-DRUG RESISTANT GONORRHOEA

ALERT FOR CLINICIANS

KEY POINTS

- **Two cases of multi-drug resistant gonorrhoea have recently been detected in Australia caused by strains with the highest level of antibiotic resistance ever recorded.**
- **Most cases of multi-drug resistant gonorrhoea have arisen in Southeast and East Asia.**
- **The initial approach to management of gonorrhoea remains unchanged, however:**
 - **be aware of the increased risk of multi-drug resistant isolates**
 - **take ‘test of cure’ samples from all cases infected in Southeast and East Asia**
 - **seek specialist advice when first line treatment fails or where the antibiotic sensitivity report indicates resistance to ceftriaxone and/or azithromycin.**

In March 2018, two unlinked cases of highly antibiotic-resistant gonorrhoea were diagnosed in Western Australia and Queensland. One case was acquired in Southeast Asia and the source of the other case is under investigation. The *Neisseria gonorrhoeae* strains of these cases, and a recent case in the UK, have high level **resistance to ceftriaxone and azithromycin**, the first line antibiotic treatment in WA (apart from remote regions). These strains also showed the more commonly seen resistance to penicillin and ciprofloxacin, making them the first ever reported that are resistant to all antibiotics used in routine treatment for gonorrhoea. This has serious public health implications, as treatment can be complex and infections may ultimately become untreatable with currently available drugs.

How does this change the management of cases of suspected gonorrhoea?

- The initial approach to the testing, treatment, follow-up and contact tracing of gonorrhoea remains unchanged - please refer to the *WA Guidelines for managing sexually transmitted infections and blood-borne viruses* (the ‘Silver Book’) <http://ww2.health.wa.gov.au/Silver-book>
- Have a high index of suspicion for antibiotic-resistant strains if the patient has recently travelled in **Southeast and East Asia**.
- **Take a sexual and travel history** and take appropriate samples from all potentially infected sites: dry swabs for PCR testing as well as swabs on all symptomatic patients for culture and antimicrobial susceptibility (note PCR samples are not suitable for susceptibility testing).
- Ensure a swab for **culture is taken as a ‘test of cure’** for all cases infected in Southeast and East Asia (note PCR is not valid for ‘test of cure’ if taken <14 days from start of treatment).
- **Seek specialist advice** for all cases where (i) first line treatment fails; and/or (ii) the antibiotic sensitivity report indicates resistance to ceftriaxone and/or azithromycin.

Specialist advice can be found at (Royal Perth Hospital Sexual Health Clinic, 9224 2178, or South Terrace Clinic at Fremantle Hospital, 9431 2149).

Further information about this health alert can be found at the <http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-gonorrhoea.htm>

Dr Paul Armstrong
DIRECTOR,
COMMUNICABLE DISEASE CONTROL DIRECTORATE