MYCOPLASMA GENITALIUM: TEST-POSITIVITY IN SYNDROMIC PRESENTATIONS AND COMPLIANCE WITH TREATMENT GUIDELINES AT SYDNEY SEXUAL HEALTH CENTRE

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Background: *Mycoplasma genitalium* (*M.gen*) causes non-gonococcal urethritis (NGU), cervicitis, pelvic inflammatory disease (PID), proctitis, and is associated with epididymitis. Emerging macrolide resistance is complicating its treatment, necessitating the use of resistance-guided therapy. We assessed *M.gen* testing and treatment compliance with local guidelines at Sydney Sexual Health Centre (SSHC).

Methods: For patients presenting with sexually transmitted infection (STI)-related syndromes between August - December 2018, we recorded *M.gen* test-positivity, macrolide-resistance (MR) or sensitivity (MS), demographics, sites of infection, treatment regimen, co-existing STIs, and test of cure (TOC) results. 95% confidence intervals were calculated; the relationship between co-existing STIs and guideline compliance was assessed with a chi-squared test.

Results: 349/372 (94%) syndromic presentations were tested for *M.gen*, of which 20% NGU, 13% cervicitis, 11% PID, 11% proctitis and 6% epididymitis cases were *M.gen*-positive. Overall, 81% were MR. 16/27 (59%) MS *M.gen* infections were appropriately prescribed doxycycline and azithromycin while 65/77 (84%) MR infections were correctly treated with doxycycline and moxifloxacin. *M.gen* was the sole pathogen identified in 68% cases. There was no significant difference in compliance with treatment guidelines between patients with and patients without co-existing STIs at the time of MS ($p = 0.30$) or MR *M.gen* ($p = 0.94$) diagnosis. Of the patients who returned for TOC, 13/14 (93%) MS and 36/49 (69%) MR infections were cured.

Conclusion: *M.gen* is common in all STI syndromic presentations at SSHC with a high proportion of MR. Despite higher cure rates for MS *M.gen* than MR cases, clinicians were less compliant with treatment guidelines for MS infections. This compliance was not affected by the presence of co-existing STIs at the time of diagnosis. The role of resistance-guided therapy should therefore be reinforced, and possible barriers to compliance identified. Further research is warranted to optimise current management strategies of macrolide-resistant *M.gen* and improve cure rates.

Disclosure of interest statement
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