

specimens 17% (12/73) [male (3/61 (5%) and female 9/12 (75%)] were wild-type and therefore assumed to be sensitive to macrolides.

Discussion/conclusion Eighty-four percent of MG specimens examined had SNPs associated with macrolide resistance. These levels of resistance are higher than previously documented in other studies and highlight the need for (i) greater access to MG diagnostic testing and (ii) a requirement for more effective antimicrobials if MG infection is to remain a treatable in the future.

Abstract O27 Table 1 Characteristics of point mutations in the 23S rRNA gene from 73 MG specimens

Sequence identified	Phenotype	No. specimens (73)	No. by sex (M – 61, F – 12)
Wild-type	Sensitive	12/73 (17%)	M – 3/61 (5%) F – 9/12 (75%)
A2058G	Resistant	22/73 (31%)	M – 21/61 (34%) F – 1/12 (8%)
A2058T	Resistant	1/73 (1%)	M – 0/61 (0%) F – 1/12 (8%)
A2059G	Resistant	34/73 (47%)	M – 32/61 (53%) F – 2/12 (17%)
A2059C	Resistant	4/73 (6%)	M – 4/61 (7%) F – 0/12 (0%)

O28 TREATMENT OF MYCOPLASMA GENITALIUM WITH AZITHROMYCIN 1 G IS LESS EFFICACIOUS AND ASSOCIATED WITH INDUCTION OF MACROLIDE RESISTANCE COMPARED TO A 5 DAY REGIMEN

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Background *Mycoplasma genitalium* (MG) is an emerging important STI. Failure rates with azithromycin 1 g appear to be increasing. This may be due to the emergence of macrolide antimicrobial resistance as a consequence of extensive use of azithromycin 1 g. An extended regimen of azithromycin 500 mgs on day one then 250 mgs daily for 4 days (5 day regimen) was introduced in the 1990s for treatment of MG and has high efficacy rates (if no pre-existing macrolide resistance) and is less associated with induction of macrolide resistance. There are no comparative trials of the two regimens.

Aim To undertake a meta-analysis of MG treatment studies using the two azithromycin regimens to determine which is more effective.

Methods MG treatment studies were included if: patients were initially assessed for macrolide resistance genetic mutations, were treated with azithromycin 1 g or 5 days, and those who failed were again resistance genotyped. Sensitivity analyses included only patients without prior treatment.

Results Five studies were identified. Compared to the 5 day regimen, azithromycin 1 g had higher failure risk (difference: 11.8%, 95% CI: 7.3%, 16.2%) and more developed macrolide resistance (risk difference: 11.8% (8.3%, 15.3%)). The 5 day regimen included 52 patients with prior doxycycline treatment. Sensitivity analysis showed a failure risk difference of 9.2% (0.9%, 17.5%). Resistance risk did not change.

Conclusion Azithromycin 1 g is more likely to result in treatment failure and the development of macrolide antimicrobial resistance than 500 mgs on day one then 250 mgs daily for 4 days.

O29 TV IN PRIMARY CARE – IS THERE MORE OUT THERE THAN WE THINK?

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Background Tests for *Trichomonas vaginalis* (TV) are often not performed on samples submitted from primary care because the prevalence is assumed to be too low for testing to be cost effective. Current microbiological testing involves wet mount microscopy (sensitivity 50%) or culture (sensitivity 75%). In practice, sensitivity rates may often be lower than this, due to deterioration of specimens during transport to the laboratory. The Aptima TV NAAT test has recently been approved for use (sensitivity ~100%).

Aim To determine the positivity of TV in symptomatic and asymptomatic women at risk of an STI, seen in primary care using Aptima TV NAAT.

Methods The Aptima TV NAAT test was performed on 6716 remnant samples from women undergoing chlamydia and gonorrhoea NAAT testing in primary care.

Results The positivity of TV in symptomatic and asymptomatic patients from primary care was 2.6% (86/3271) and 1.2% (40/3445) respectively compared with an expected positivity of 0.3% and 0.1%, based on existing methods. TV positivity rates varied between GP practices from 0% to 4.8%. Higher positivity rates were observed in practices serving areas of deprivation, as well as those with higher black and minority ethnic populations.

Conclusions This is the first study to report TV positivity, using a TV NAAT, in unselected women presenting for STI testing in

Abstract O28 Table 1 Treatment of *Mycoplasma genitalium*

Study	Sample size	Treated with 5 day regimen			Number treated with 1 g regimen		
		Total	Failure	Resistance	Total	Failure	Resistance
Anagrus <i>et al.</i> 2013	195	78	1 (1.3%)	0	117	10 (8.5%)	7 (6.0%)
Twin <i>et al.</i> 2012	66	0			66	14 (21.2%)	14 (21.2%)
Couldwell <i>et al.</i> 2013	12	0			12	4 (33.3%)	3 (25%)
Walker <i>et al.</i> 2013	28	0			28	3 (10.7%)	3 (10.7%)
Bissessor <i>et al.</i> 2014	99	0			99	11 (11.1%)	11 (11.1%)
Total	400	78	1 (1.3%)	0	322	42 (13.0%)	38 (11.8%)