Testing for and managing Mycoplasma Genitalium in women attending a GUM clinic 2016-2017

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Introduction

There is mounting evidence to suggesting Mycoplasma Genitalium (MG) causes cervicitis and pelvic Inflammatory disease (PID) in women. Within our clinic, we currently test all women with suspected PID/cervicitis and contacts of men with MG urethritis.

Aim

To determine effectiveness of testing and managing MG in women attending a level 3 GUM clinic.

Method

Women coded for MG infection between November 2016 and October 2017 were identified. Their clinic records were reviewed for clinical presentation, antibiotic usage and time to microbiological cure.

Results

Over the 12 month period, 790 women were tested for MG and 66 (8.4%) were positive. The median age was 22 (17-45) years, and 54/66 (81.8%) were of white ethnicity. 15/66 (22.7%) presented as sexual contacts of MG. 42/66 (63.6%) had symptoms at presentation (fig.1), with 42% having ≥2 or more (fig.2). Co-infections were seen with Chlamydia Trachomatis 6/66(9.1%) and Neisseria Gonorrhoea 3/66 (4.5.%) and concomitant bacterial vaginosis was found in 15/66 (22.7%). During the same time period, 241 women were diagnosed with PID and MG was detected in 22/241 (9.1%) of these.

Of the 66 positive cases, all were offered either first line treatment with a five day course of extended azithromycin (500mg stat and 250mg od for four days), or second line 10-14 days of moxifloxacin (400mg od).

All were asked to return for test of cure (TOC) at four weeks post treatment. 51/66 (77.3%) attended and 16/51 (31.3%) had a positive TOC despite documented treatment adherence but 10/16 (62.5%) did claim a re-infection risk. All positive TOCs had been treated with extended azithromycin and 10/16 (62.5%) were asymptomatic at presentation. Following retreatment, 11/16 (68.8%) attended for a second TOC, with 6/11(54.5%) remaining positive, despite complying with treatment adherence and abstinence. Of these, four had been incorrectly retreated with azithromycin, one with moxifloxacin and one refused initial re-treatment. All six were retreated a third time with moxifloxacin and subsequently cleared. Median time to microbiological cure following one treatment regimen was 35 days (14-85) and for ≥2 regimens was 168 days (fig.3).

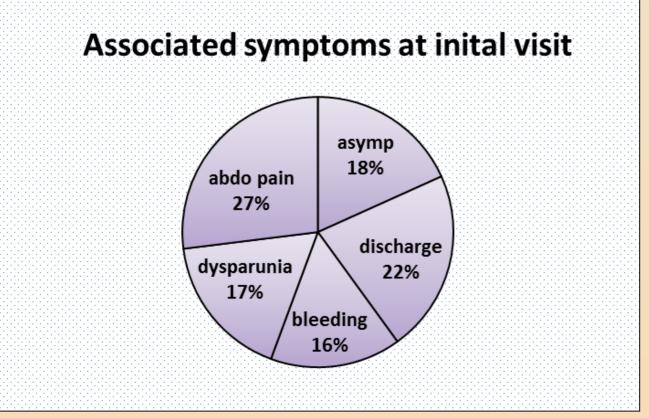


Figure 1 Presenting symptoms at initial visit to the GUM clinic

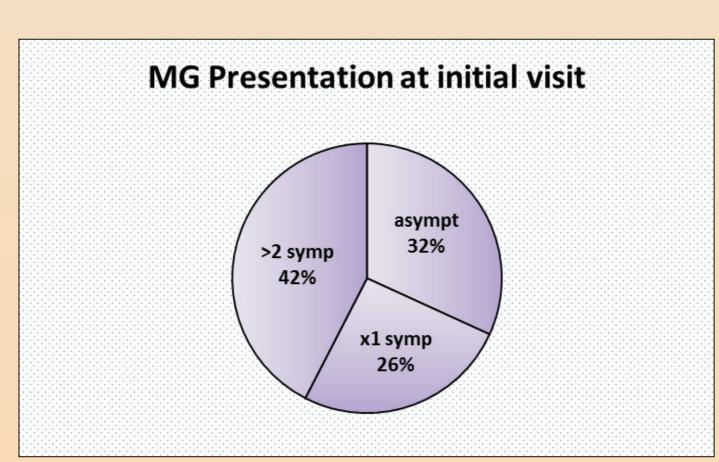
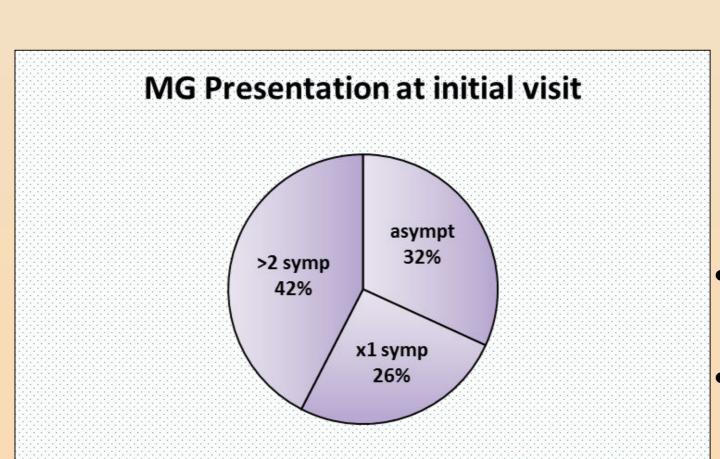


Figure 2 proportion of symptomatic/asymptomatic patients at initial visit.

<u>Treatment</u>	<u>Days Cleared</u>
Azithromycin 5 day course	35 days
Moxifloxicin 10-14/7 course	41 days
Azithromycin/Moxifloxacin	143 days
>3 Treatments	168 days

Figure 3 Days to microbiological cure, using 1,2 or ≥ 2

treatment regimens



Discussion

- Good rates of clinical cure suggest infection clearance, but treatment failure with azithromycin is common (31.3%) inferring high rates of macrolide resistance once poor adherence and re-infection risk have been excluded.
- Azithromycin use is associated with much longer time to achieving microbiological cure.
- Moxifloxacin remains effective with no treatment failures.
- Attendance for TOC is poor and may be partially explained by asymptomatic nature of presentation.
- Managing Mycoplasma Genitalium without macrolide resistance testing is laborious, expensive and time consuming.
- Macrolide resistance testing alongside detection is strongly recommended where a MG testing service is being implemented.





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