

P057 - Prevalence of macrolide resistance mutations (MRM)

Dr Manoj Malu & Bharti Raghav - Clarewell Clinics, Birmingham

Background

Mycoplasma genitalium (MG) is being increasingly diagnosed in the UK with increased awareness amongst clinicians and access to molecular diagnostic tests over the last few years. However, treating this infection is challenging due to antibiotic resistance, lack of access to macrolide resistance mutation (MRM) test for individual cases and the paucity of current or recent antimicrobial resistance data in the UK.

To our knowledge, the last available data in the UK from samples collected in 2010-12 from the general population showed the presence of MRMs in 16.1% (9/56) MG positive specimens.

Introduction

In Clarewell clinics, MG PCR test was recommended to the patients who presented with the symptoms and signs suggestive of this infection or reported to have been a sexual contact of MG.

Those who tested positive for MG were offered MRM tests, and the test was performed on the samples with the patient's agreement.

MG PCR and MRMs test detecting the mutation at nt2072G position in the 23S rRNA was performed by Micropathology Limited, University of Warwick.

Results

DNA PCR test	Patients tested n (100%)	Positive n (%)	Negative n (%)
MG	277 (100%)	22 (7.9%)	255 (92.1%)
MG MRM	13 (100%)	9 (69.2%)	4 (30.8%)

7.9% (22/277) patients tested MG positive using a DNA PCR test. Of these 22 patients, 17 (77.3%) patients were symptomatic, whereas 5 (22.7%) did not have any symptoms.

4 patients out of 22 who tested positive for MG, 2 patients were also positive for chlamydia, 1 for gonorrhoea and 1 for both chlamydia and gonorrhoea.

Out of the 22 patients who were tested positive for MG, 13 patients opted to go for MRM test. MRM was detected in 69.2% (9/13) patients at nt2072G position in the MG 23S rRNA gene using a DNA PCR test.

Two patients did not have the MRM test as their partners' have already had their MRM test results available.

Conclusion

Macrolide resistance mutations were detected in 9 (69.2%) out of 13 patients who tested positive for MG. Such a high prevalence of MRM should be considered in formulating current guidelines to treat MG.