

UPDATE ON AZITHROMYCIN RESISTANT GONORRHOEA STRAINS FROM AN INNER CITY GUM CLINIC

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Background

Gonorrhoea remains one of the most common sexually transmitted infections in the UK. Successful treatment has been threatened by emerging resistance to first line antibiotics. Recently an increasing number of isolates with high-level resistance to azithromycin have been reported at sexual health services across the UK. In March 2018 the first global report of gonorrhoea with high-level resistance to azithromycin and resistance to ceftriaxone was published highlighting the importance of ongoing antibiotic resistance surveillance¹. We present data on azithromycin resistance from an inner city GUM clinic.

Methods

Laboratory records were reviewed to identify azithromycin resistant gonorrhoea isolates from April – December 2017. Patient records were reviewed to collate demographic and clinical information including data on patient management.

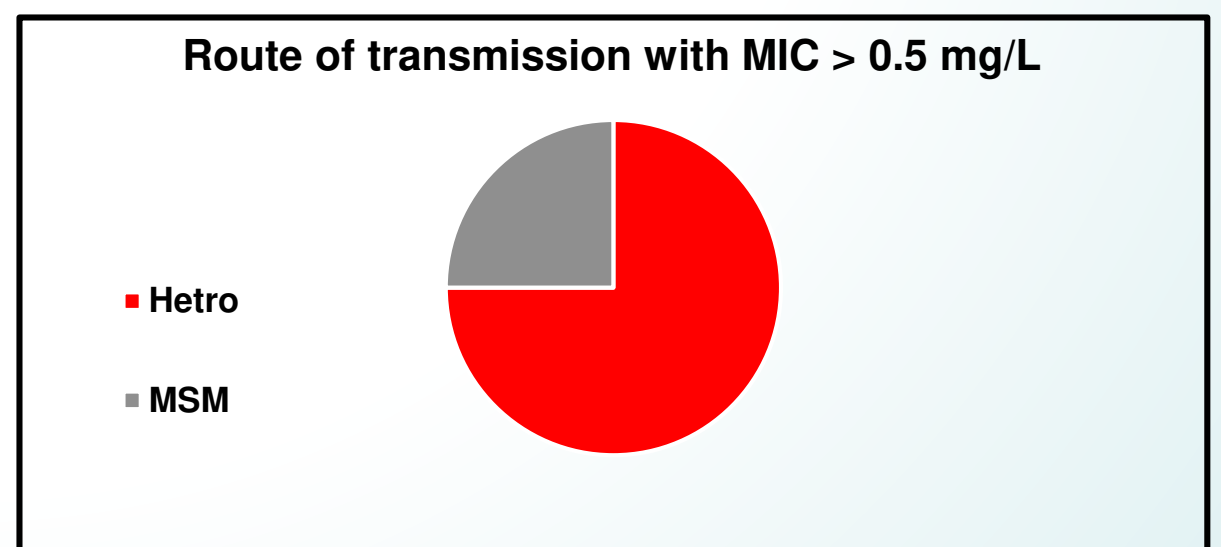
Results

Thirty isolates were identified with reduced susceptibility to azithromycin in 2017. Of these, twenty-two showed intermediate resistance with minimum inhibitory concentration (MIC) values 0.25-0.5mg/L. Six isolates had confirmed resistance with MIC values 0.51-256mg/L and two had MIC values >256mg/L indicating high-level azithromycin resistance. Of the eight isolates with MIC values >0.5mg/L, the median age reported was 25 years old. Seventy-five percent were associated with heterosexual transmission and site of infection was reported as

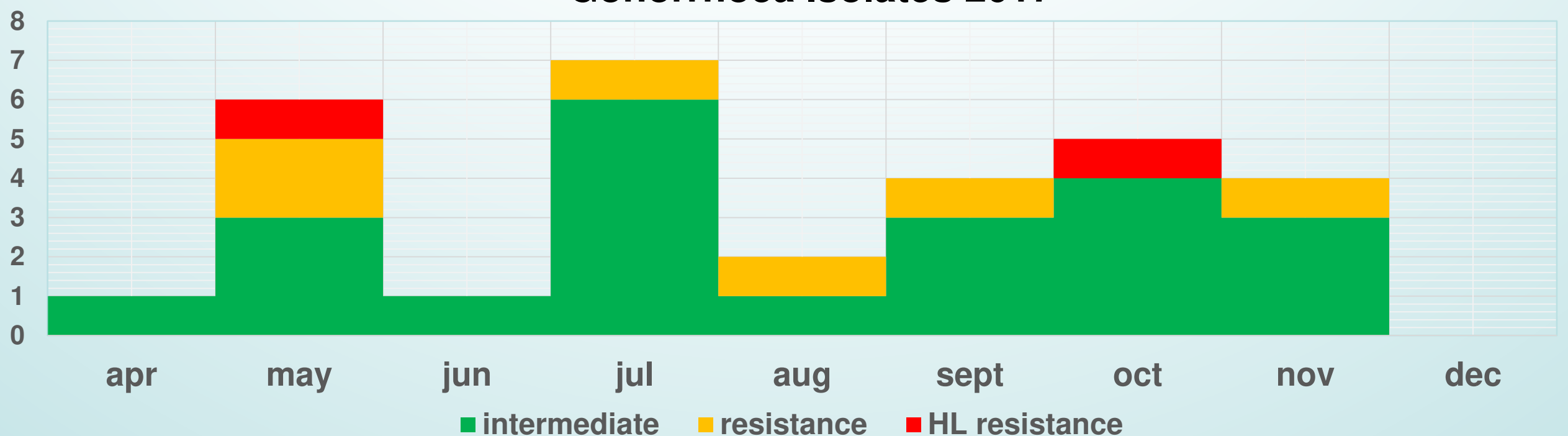
genital in eighty-seven percent. In regard to treatment, six patients had signs of gonorrhoea infection at presentation and were treated with ceftriaxone and azithromycin 1g (two MSM also received doxycycline). The remaining two asymptomatic patients (culture result available prior to treatment) received ceftriaxone and ciprofloxacin in addition to either azithromycin 2g or doxycycline. Test of cure was achieved in all eight patients. High-level azithromycin resistance (MIC >256mg/L) was identified in two isolates. Mean age of this patient group was 19.5 years and both isolates were associated with heterosexual transmission. Both patients treated with ceftriaxone and azithromycin 1g achieving test of cure.

Conclusions

The emergence of azithromycin resistant gonorrhoea strains has prompted clinicians to ensure such isolates are recognised and managed effectively. Interestingly, MSM transmission accounted for only 25% of azithromycin resistant isolates in comparison to over 50% of total gonorrhoea isolates in the clinic. Thorough partner notification and prompt treatment is paramount to prevent rapid spread amongst high-risk sexual networks such as MSM.



Gonorrhoea Isolates 2017



1. PHE :Health Protection Report Volume 12 Number 11.