
Free Oral Session (FOS)

O-04-01 Rise in Gonorrhoea Notifications from Nucleic Acid Amplification Test (NAAT) among Very Low Prevalence Women without Changes in Proportion Positive by Culture

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Background: There has been a rapid increase in the number of *Neisseria gonorrhoeae* (gonorrhoea) notifications in women in Victoria over the last decade. This study aimed to examine whether the rapid increase of gonorrhoea identified by nucleic acid amplification test (NAAT) is supported by similar changes in culture and to determine the proportion of tests positive among women tested.

Method: Three data sources were used from 2008 to 2013. The Medicare Item Reports were used to examine the change in the number of NAATs performed. The number of gonorrhoea notifications was obtained from the Victorian Department of Health. We also examined the results of gonococcal culture testing of women who attended the Melbourne Sexual Health Centre (MSHC).

Results: Gonorrhoea cases identified by NAAT in women increased from 98 to 343 cases from 2008 to 2013; however, notifications by culture alone decreased from 19 to 5 in the same period. The proportion of NAAT positive for gonorrhoea in Victoria was low (0.2-0.3%) and did not change over time (ptrend=0.66). Similarly the portion of women tested at MSHC for gonorrhoea who were positive (0.4%) did not change over time (ptrend=0.70). Of the untreated women who had a positive NAAT result for gonorrhoea and referred to MSHC, only 40% were confirmed by culture.

Conclusion: A substantial proportion and rising number of notifications of gonorrhoea in women from NAAT are likely to be false positives. Practitioners and laboratories should adhere to the product inserts that warn against the use of NAAT testing for gonorrhoea in low prevalence populations when the test can have substantially reduced positive predictive values. Testing should be restricted symptomatic women and screening restricted to individuals at significant risk of gonorrhoea.