Conclusion: The RCPAQAP Strongyloides pilot studies demonstrated the need for an ongoing EQA to enable laboratories to confirm the presence or absence of Strongyloides antibodies and assist in evaluating method performance for the accurate reporting of Strongyloidiasis, particularly low-level positive samples.

SUPPLEMENTARY ASSAYS FOR THE DETECTION OF NEISSERIA GONORRHOEA, IS IT TIME TO REVIEW OUR PROTOCOLS?

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Nucleic acid amplification tests (NAAT) are widely employed in laboratories for detection of *N. gonorrhoea*. Due to false positive results from earlier generation NAAT assays, testing algorithms recommend a supplementary assay in addition to the initial screening test for all initial positive results - public health laboratory network guidelines.¹

Our laboratory tests for *Chlamydia trachomatis* and *Neisseria gonorrhoea* on the Roche Cobas® CT/NG (6800/8000 systems) and uses the AusDiagnostics Urogenital 8-well assay for supplementary testing. Over a 3 month period in 2019, 730 initial positive gonorrhoea results were obtained of which 57 (7.8%) were negative on supplementary testing. Throat swabs were the sample type least likely to have concordant results, with 23/125 (18.4%) negative on the supplementary assay. This is compared to 8/50 (16%) of rectal swabs, 9/99 (9.1%) of genital-site swabs and 14/414 (3.4%) of urine specimens. With the exception of throat swabs, all initial positive results with a cycle threshold <35 cycles were also positive on the supplementary assay.

Results suggests that routine supplementary testing for all samples may not be necessary and that this two test algorithm could be reconsidered.

Reference

1. Smith DW, Tapsall JW, Lum G. Guidelines for the use and interpretation of nucleic acid detection tests for *Neisseria gonorrhoeae* in Australia: a position paper on behalf of the Public Health Laboratory Network. *Commun Dis Intell Q Rep* 2005; 29: 358–65.

AN ASSESSMENT OF THE CLINICAL IMPACT OF POSITIVE BIOFIRE FILMARRAY MENINGITIS/ ENCEPHALITIS (ME) PANEL RESULTS

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Introduction: BioFire FilmArray ME Panel is a rapid multiplex polymerase chain reaction (PCR) panel for 14 meningeal pathogens with results available in about one hour. The introduction of this rapid diagnostic platform revolutionised the workflow in our laboratory with a significant impact on patient management.

Aims and methods: Fifty positive CSF results were retrospectively analysed to determine turnaround times (TATs) and

contribution of a positive CSF results to clinical care of the patient such as early cessation of antibiotics and early discharge from the hospital.

Results: Average TAT for a positive CSF multiplex PCR was 4 hours. Early cessation of antibiotics and almost immediate discharge was noted for the majority of positive results (25/50) caused by enteroviral meningitis. In the bacterial meningitis cases the result enabled clinicians to quickly switch over to directed therapy.

Conclusion: This audit demonstrates BioFire FilmArray ME panel facilitated rapid diagnosis of bacterial meningitis followed by early switching of empirical antibiotics to the pathogen specific directed therapy and early discharge of meningitis.

RAPID ANTIFUNGAL SUSCEPTIBILITY TESTING FOR YEAST STRAINS USING A COMBINATION OF VITEK 2 AST YS08 AND E TEST AND SENSITRE YEASTONE METHODS

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Introduction: Candidaemias and other invasive yeast infections has a significantly high mortality. Therefore clinical microbiology laboratories should be able to offer quick antifungal susceptibility testing especially for isolates from sterile sites. Current gold standard reference method take at least 2–4 days to obtain a result. According to current Australian antibiotic guidelines, patients often continue to receive broad spectrum echinocandins during this interim period. With the recent availability of Vitek 2 AST YS08 panel, we have opportunity to explore the option of quicker results.

Aims: Comparison of the results of the two systems in view of introducing Vitek 2 AST YS08 panel (bioMérieux) for routine susceptibility testing.

Methods: Thirty-five consecutive blood and sterile isolates of yeasts (predominantly *Candida* spp. were tested using Vitek 2 AST YS08 panel on site with results compared with the Sensititre YeastOne method (Thermo Fisher) in the reference laboratory. The former panel was supplemented by Fluconazole E test, whenever the Vitek-2 MIC was suppressed.

Results: Antifungal susceptibilities for 6 antifungal drugs compared well with a very high degree of concordance with the reference method.

Conclusion: Our results demonstrate that Vitek 2 YAST S08 panel supplemented with E test MIC for common antifungals such as fluconazole is a promising tool for routine use. However, we would like to continue our study longer to increase the number of strains and variation of yeasts.

COMPARATIVE ANALYSIS OF ELECTRO-CHEMILUMINESCENCE IMMUNOASSAY (ECLIA), ELISA AND RAPID DIAGNOSTIC TEST (RDT) FOR DETECTION OF HEPATITIS B SURFACE ANTIGEN (HBSAG)

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