

Is there value in routine screening exercises for syphilis? Coincidental syphilis detection in samples submitted for routine HSV investigations

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Background:

A sustained outbreak of infectious syphilis has been documented in Australia since 2011. Although treatment of syphilis with antibiotics is highly effective, the ongoing spread of this pathogen in Australia suggests that diagnosis may be suboptimal. Molecular detection of syphilis is now commonly performed; however, in many instances clinicians request separate tests for specific pathogens, which may lead to issues in failing to request testing for *Treponema pallidum* subspecies *pallidum*, the causative agent of syphilis.

Methods:

In this study, we performed routine screening of 5052 samples submitted to our local pathology provider for routine herpes simplex virus investigations. Samples were tested for the presence of *T. pallidum*.

Results:

We identified a total of 41 samples (0.8%) which were *T. pallidum* positive. Of these, the majority of samples reassuringly had requests for *T. pallidum* testing requested; however, samples from three patients (including a pregnant female) were identified as part of this exercise, who would have otherwise remained undetected and untreated.

Conclusion:

This study demonstrates the clear value in routine screening exercises such as this to improve the timely detection and management of syphilis. Additionally, implementation of multiplex assays for co-detection of lesion/chancere-associated pathogens would enhance detection, whilst balancing the cost of testing in pathology laboratories across Australia.

Disclosure of Interest Statement:

None