

consecutively with total of 127 samples. All steps in this research; history taking, physical examination, and blood tests were done blindly.

Results The results of this study using serum specimens were sensitivity of 91.30%, specificity of 97.53%, positive predictive value 95.45%, negative predictive value of 95.18%, and accuracy 95.28. Test results with fingerprick whole blood specimens gave sensitivity of 84.78%, specificity of 98.77%, positive predictive value of 97.50%, negative predictive value of 91.95%, and accuracy 93.70%. Compatibility of rapid test STANDARD™ Q Syphilis Ab results between serum and fingerprick whole blood specimens was very good ($\kappa=0.8223$).

Conclusion Rapid test STANDARD™ Q Syphilis Ab can be used as an option for treponemal test in supporting syphilis diagnosis, either as routine screening or confirmation of non-treponemal test result. The fingerprick whole blood specimen can be used as treponemal test alternative which is faster and easier to do.

Disclosure No significant relationships.

P750 A COMPARISON OF *TREPONEMA PALLIDUM* MOLECULAR TYPING SYSTEMS: MLST VS. ECDCT

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10.1136/sextrans-2019-sti.808

Background Several syphilis typing systems have been proposed. Recent work suggests that multilocus sequence typing (MLST) may be superior to enhanced CDC typing (ECDCT), particularly because ECDCT type may differ among organisms amplified from different anatomical sites in the same person. The goal of this study was to compare the two systems.

Methods DNA was extracted from 20 *Treponema pallidum* isolates propagated in rabbits, 10 oral and 10 genital or non-genital lesion swabs, and 10 blood samples from patients with syphilis. MLST type for *tp0136*, *tp0548* and *tp0705* and ECDCT type were determined according to published methods. Samples were chosen because they were completely typeable by ECDCT. ECDCT types were also determined for samples from different anatomical sites in 7 patients, and from blood and blood isolates (rabbit propagated) in 8 patients.

Results MLST type could be fully determined for 19 (95%) of 20 bacterial isolates, 8 (80%) of 10 bloods, 7 (70%) of 10 lesion swabs, and 5 (50%) of 10 oral swabs. 13 subtypes were identified by ECDCT, and 12 by MLST. While MLST was able to subdivide two common ECDCT types (1.1.1, 1.1.2, 1.1.9, and 1.37.1 within 14d/f; and 1.3.1, 1.38.1, and 6.3.1 within 14d/g), it failed to distinguish among less common ECDCT types. ECDCT type was identical in 5 paired lesion and oral swabs, 1 paired blood and oral swab, and 1 paired blood, lesion and oral swabs. In addition, ECDCT type was identical in 8 paired blood and blood isolates.

Conclusion Compared to ECDCT, determination of MLST was less often successful from isolates and from clinical samples, and it was not uniformly more discriminating. ECDCT was stable among anatomical sites and between direct patient-derived samples compared to rabbit propagated organisms.

Disclosure No significant relationships.

P751 EVALUATION OF A SYPHILIS AWARENESS CAMPAIGN FOR GAY, BISEXUAL AND OTHER MSM (GBMSM): DID WE REACH OUR TARGETED AUDIENCE?

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10.1136/sextrans-2019-sti.809

Background In 2017, we launched a syphilis awareness campaign (“Syphistory”) targeted towards gay, bisexual, and other men who have sex with men (gbMSM). Using data from a study of gbMSM in Vancouver, we describe participants who reported seeing Syphistory and whether it reached gbMSM at higher risk of syphilis.

Methods Participants aged ≥ 16 years who reported having sex with another man in the previous six months were recruited through respondent-driven sampling. We analyzed data collected from September 17, 2017 to August 31, 2018. Characteristics of participants who reported seeing the campaign were compared using Wilcoxon rank-sum and chi-square/Fisher’s exact test. Multivariate logistic regression was used to examine the association between seeing Syphistory and recently being tested for syphilis, controlling for potential confounding factors, namely age, HIV status, place of residence, education level, and recent illicit drug use (IDU).

Results Of the 383 participants who responded, 103 (27%) reported seeing Syphistory. Participants who saw Syphistory tended to be younger (median 30 vs 32 years old, $p=0.03$), live in downtown Vancouver (58% vs 38%, $p=0.46$), had greater than a high school education (97% vs 89%, $p=0.08$), and were known to be HIV-negative (92% vs 81%, $p=0.15$). They reported more male sex partners (median 4 vs 3, $p=0.12$), condomless anal sex (92% vs 81%, $p=0.06$), and IDU (86% vs 72%, $p=0.04$) in the last 6 months. Almost 75% (52/86) of those who saw Syphistory reported a syphilis test within the last 3 months compared with 58% (97/244) who did not see Syphistory ($p=0.01$). Participants who saw Syphistory had a greater odds (aOR=3.63; 95% CI, 1.28–10.27) of a syphilis test within 3 months, versus no or unknown previous syphilis test.

Conclusion Participants who saw Syphistory tended to report behaviours that may increase the risk of syphilis infection and were more likely to have had a recent syphilis test.

Disclosure No significant relationships.

P752 UNDERSENSITIVE NON-TREPONEMAL TESTS: IMPLICATIONS FOR SYPHILIS MANAGEMENT

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10.1136/sextrans-2019-sti.810

Background Syphilis management has traditionally been based on non-treponemal tests (NTT). However, investigations over 3 decades have revealed serious issues with the sensitivity of NTT.