PREVALENCE AND TYPE-SPECIFIC DISTRIBUTION OF ONCOGENIC HUMAN PAPILLOMAVIRUS AMONG FEMALE SEX WORKERS IN COTONOU, WEST AFRICA

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Background Female sex workers (FSW) are at higher risk of Human Papillomavirus (HPV) infections. Yet, few data exist on the prevalence and the types of HPV circulating among them. Baseline data from FSW recruited in a longitudinal study were analyzed to determine the prevalence and type-specific distribution of oncogenic HPV among FSW in Cotonou.

Methods Data from 309 FSW with valid cervical specimens (out of 312 enrolled) were analyzed. Cervical specimens were processed through March 2019, using the Linear Array HPV genotyping test (LA-HPV) (Roche Molecular Systems). Where appropriate, a real-time PCR assay specific for type 52 was performed to control for cross-reactivity with HPV-33, 35 or 58.

Results The overall and type-specific prevalence of oncogenic HPV were estimated according to the level of risk: high risk (HR-HPV) and low risk (LR-HPV). The mean age of the 309 women at enrollment was 34.97 (± 10.66) and that at their first intercourse was 17.53 (± 2.66). Almost half of them (45.8%) were Beninese and 25.8% were HIV positive. Condom use at the last sex with clients and boyfriend was reported by 97.7% and 14.5% of women, respectively. At least one HR-HPV was detected in 237 women (88.3%) and the ten most frequent were HPV58 (37.5%), HPV16 (36.6%), HPV52 (28.8%), HPV35 (23.3%), HPV68 (22.0%), HPV18 (20.7%), HPV45 (15.2%), HPV23 (11.0%), HPV59 (9.1%), HPV51 (6.5%). HR-HPV were found in 186 women (60.2%): HPV58 (± 2.66). Almost half of them (45.8%) were Beninese and the ten most frequent were HPV58 (37.5%), HPV16 (36.6%), HPV52 (28.8%), HPV35 (23.3%), HPV68 (22.0%), HPV18 (20.7%), HPV45 (15.2%), HPV23 (11.0%), HPV59 (9.1%), HPV51 (6.5%). HR-HPV were found in 186 women (60.2%): HPV81 (23.6%), HPV61 (23.0%), HPV70 (15.2%), HPV54 (11.0%), HPV59 (9.1%), HPV51 (6.5%). LR-HPV were found in 103 women (33.5%) and the ten most frequent were HPV68 (22.0%), HPV18 (20.7%), HPV45 (15.2%), HPV33 (11.0%), HPV59 (9.1%), HPV35 (6.5%). HR-HPV vs LR-HPV were not detected.

Conclusion To our knowledge, this study is the first to provide HPV data among FSW in West Africa. The high prevalence and atypical distribution of oncogenic HPV among this high risk population might have implications for vaccine design.

Disclosure No significant relationships.

AN UNUSUAL CONSTELLATION OF SYMPTOMS: OUTPATIENT DIAGNOSIS OF NEUROSYphilIS WITH NO HISTORY OF PRIOR SYphilIS SYMPTOMS

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Background Neurosyphilis presents in early and later stages of syphilis. Cerebrospinal fluid, meninges and vascular structures are involved in the early stages of neurosyphilis, while in the late stage; cerebral tissue and spinal cord parenchyma are affected. Neurosyphilis can manifest with many different symptoms. Diagnosis criteria remains ambiguous and treatment options are classified very low quality of evidence by World Health Organization. We present a case of neurosyphilis with progressive sensory loss whose primary and secondary phases were not detected.

Methods 52 year old male initially presented with upper respiratory symptoms, headache, facial swelling, and visual disturbances, 20 pound weight loss, positive candida throat culture, diagnosis of panuveitis, and progressive hearing loss prompted diverse differential workup. Rapid plasma reagin and fluorescent treponemal antibody absorption were positive suggesting syphilis and with neurologic symptoms met neurosyphilis diagnosis. After penicillin treatment, symptoms resolved and labs showed disease resolution.

Results RPR titer high 1:128. In 2 months, WBC count increased from 9.8 to 22.0. CSF analysis showed a neurophilic leukocytosis with elevated protein. Repeat CSF 6 months post-treatment showed negative VDRL CSF qualitative and titer negative. RPR 1:4. Syphilis antibody ≥ 70.0 high.

Conclusion Neurosyphilis can be encountered in sensory, neuropsychiatric and neurologic domains. The incidence of syphilis in Michigan has increased from 363 to 480 cases and with a national 10.5% increase from 2016 to 2017. In this case, neurosyphilis improvement was observed with resolution of sensory deficits with penicillin treatment. Impaired cognition or mood disturbance were not observed throughout the patient’s clinical course. Attention should be given to progressive sensory loss because syphilis in its early stages can be overlooked, left untreated and can lead to irreversible manifestations. This case illustrates the need for further awareness on neurosyphilis as this disease can present in forms that are not common to what the current literature shows.

Disclosure No significant relationships.

A CONDITIONAL PAY-FOR-PERFORMANCE PROGRAM TO IMPROVE SYphilIS SCREENING IN CHINESE STD CLINICS: A PILOT INTERVENTION

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Background Under-screening of syphilis in clinical settings is a pervasive problem, especially in resource constrained settings where heavy patient loads and competing health priorities inhibit health providers’ ability to meet screening coverage targets. We piloted a “conditional pay-for-performance (P4P) strategy,” which rewarded providers at sexually transmitted disease (STD) clinics a monetary bonus for every confirmed case of syphilis they screened. By tying rewards to the number of cases detected, this strategy seeks to incentivize providers to concentrate their counseling efforts on indicated patients who need it the most.

Methods Five STD clinics in a high syphilis transmission setting of China participated in the 6-month intervention. Data are collected before and after the intervention. The percentage of patients tested for syphilis and the number of confirmed cases are recorded. Data are analyzed using McNemar’s test and Poisson regression.

Disclosure No significant relationships.