

P031 HEPATITIS A SUSCEPTIBILITY IN MEN WHO HAVE SEX WITH MEN (MSM)

¹C Fitzpatrick*, ¹D Williams, ¹F Finnerty, ^{1,2}D Richardson. ¹Brighton and Sussex University Hospitals, Brighton, UK; ²Brighton and Sussex Medical School, Brighton, UK

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Hepatitis A is an important sexually transmitted enteric infection in MSM and an effective vaccination is available. It has been estimated that 70% of MSM need to be immune to hepatitis A in order to provide adequate herd immunity. In the UK, hepatitis A transmission in MSM is associated with high risk behaviours such as anonymous sex, multiple sexual partners, sex-on-premises venues and dating apps. European Centre of Disease Prevention and Control (ECDC) and the British Association for Sexual Health and HIV (BASHH) recommend opportunistic vaccination for all MSM.

We aimed to estimate the proportion of MSM who were susceptible to hepatitis A over a 10-year period (from 2010–2019) and to determine if there are any demographic factors associated with susceptibility which may provide useful information for future vaccination programmes.

6884 MSM attended for the first time during the study period. 1401/6884 (20%) were tested for hepatitis A IgG at this first attendance. Testing rates increased significantly between 2010–2019 (OR=67.79;95%CI=39–118, $p \leq 0.0001$). 626/1401 (45%, 95% CI=42–47) were susceptible to hepatitis A (conferred by a negative IgG). Susceptibility rates did not change significantly during the study period (OR=0.98;95% CI=0.33–2.89, $p=0.98$). MSM aged 35 years and under had significantly higher susceptibility vs MSM over 35 years (OR 3.42;95%CI=2.71 to 4.31, $p \leq 0.0001$). UK-born MSM had significantly higher susceptibility vs non-UK born MSM (OR=1.5,95%CI=1.21–1.86, $p=0.0002$). There was no difference in the presence of a sexually transmitted infection (chlamydia, gonorrhoea, syphilis, HIV) at their first attendance between susceptible and immune MSM (OR=1.2,95% CI=0.95–1.62, $p=0.1099$)

Susceptibility of Hepatitis A in MSM is much lower than necessary to control future outbreaks. It is important that effective targeting of MSM, particularly young MSM occur at all levels of healthcare, rather than waiting until opportunistic presentation at a sexual health clinic.

P032 VAGINAL MICROBIOTA CHARACTERISTICS AND GENITAL INFECTIONS AMONG PREGNANT WOMEN IN PEMBA ISLAND, TANZANIA

¹N Juliana, ²S Sazawal, ³S Ouburg, ⁴A Budding, ³J Pleijster, ⁴L Poort, ^{1,3}S Morré, ^{2,5}S Deb, ¹E Ambrosino*. ¹Maastricht University, Maastricht, The Netherlands; ²Center for Public Health Kinetics, Center for Public Health Kinetics, New Delhi, India; ³Laboratory of Immunogenetics, Department of Medical Microbiology and Infection Control, Amsterdam UMC, Location AMC, Amsterdam, The Netherlands; ⁴inBiome, Amsterdam, The Netherlands; ⁵Public Health Laboratory – Ivo de Carneri, Chake Chake, Tanzania

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Background Genital infections burden and frequency of detrimental, non-Lactobacillus dominated vaginal microbiota (VMB) are high in sub-Saharan Africa. In countries such as Tanzania these challenges overlap with, and possibly contribute to, maternal complications.

Objectives This study reported on prevalence of common, and often curable, Chlamydia trachomatis (CT), Neisseria gonorrhoea (NG), Trichomonas vaginalis (TV), Mycoplasma genitalium (MG), human papillomavirus (HPV) infections, and on VMB composition among pregnant and post-delivery women in Pemba Island, Tanzania.

Methods Vaginal swabs were collected at two timepoints during pregnancy and once after delivery by Pemba Bio-bank. Molecular assays were used to detect HPV, CT, NG, TV, and MG in samples from 438 individual women. IS-pro kit was used to characterize the VMB in a subset of women (n=90) based on 16S-23S rDNA interspacer region length. VMB were defined based on dominant species. Shannon diversity index, for number (richness) and relative abundance of species, was calculated and Mann-Whitney test used for analysis.

Results In samples from 20.5% of the women, at least one pathogen was detected. Infection with HPV was the most prevalent (10.3%), followed by TV (7.1%), CT (4.6%), MG (2.1%), and NG (0%). The most common VMB were Lactobacillus-dominant during pregnancy (77% at first, and 81% at second timepoint), and non-Lactobacillus-dominant (73.9%) postdelivery. The Shannon diversity was lower during pregnancy than postdelivery ($p=0.03$). A decrease in VMB richness ($p=0.02$) was observed during pregnancy. Klebsiella species and Streptococcus anginosus were the most common microorganisms with pathogenic potential (pathobionts) at all timepoints. A high abundance of pathobionts was seen in women with non-Lactobacillus-dominant VMB. At second timepoint during pregnancy, 67% of the women carrying a genital pathogen had Lactobacillus iners-dominant VMB.

Conclusion This study contributes knowledge on VMB composition and its changes during pregnancy and post-delivery, as well as simultaneous presence of pathobionts and genital pathogens.

P033 THE SENSITIVITY AND CLINICAL FEATURES OF PHARYNGEAL GONORRHOEA CULTURES IN MEN WHO HAVE SEX WITH MEN

¹D Trotman*, ¹A Pickering, ¹K Nicols, ¹Z Buss, ¹J Devlin, ¹F Finnerty, ^{1,2}D Richardson. ¹Brighton and Sussex University Hospitals NHS Trust, UK; ²Brighton and Sussex Medical School, UK

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Background Gonorrhoea remains a global health threat, due to increasing infection rates and antimicrobial resistance (AMR). Pharyngeal gonorrhoea in MSM drives ongoing transmission and AMR: taking pharyngeal gonorrhoea culture samples before antibiotic treatment is essential for monitoring AMR and is recommended by international guidelines. We aimed to review how frequently pharyngeal culture samples (modified Thayer Martin©) are taken in MSM with a positive gonorrhoea NAAT (BD Probetec©), the sensitivity of gonorrhoea culture compared to NAAT and any associated demographic and clinical features associated with positive gonorrhoea cultures.

Methods We reviewed the electronic case notes of MSM presenting between January–December 2019 with a positive pharyngeal gonorrhoea NAAT. We collected data on demographics, gonorrhoea culture sampling and positivity, the presence of