recognised epidemic strain, harbouring resistance to cephalosporins. ST12302 was newly recognised in 2015 and identified in two provinces, Quebec and Ontario.

Conclusion N. gonorrhoeae isolates in Canada show a significant increase in azithromycin resistance in 2014–2015. Azithromycin resistance in Canadian *N. gonorrhoeae* isolates are approaching the 5% level at which the WHO states an antimicrobial should be reviewed as an appropriate treatment. Continued surveillance of antimicrobial susceptibilities and sequence types of *N. gonorrhoeae* is necessary to identify clusters, inform treatment guidelines and mitigate the impact of resistant gonorrhoea.

P3.155 ASSESSMENT OF *ATOPOBIUM VAGINAE* AND *GARDNERELLA VAGINALIS* CONCENTRATIONS IN A COHORT OF PREGNANT SOUTH AFRICAN WOMEN

[1]Mathys J Redelinghuys, [1]Marthie M Ehlers, [1]Janine E Bezuidenhoudt, [1]Piet J Becker, [2]Marleen Kock. [1]*University of Pretoria, Pretoria, South African Republic*; [2]*University of Pretoria/National Health Laboratory Service, Pretoria, South African Republic*

10.1136/sextrans-2017-053264.390

Introduction: *Atopobium vaginae* and *Gardnerella vaginalis* are bacterial species that are present in the vagina in increased concentrations during bacterial vaginosis (BV). Numerous studies have proposed a molecular diagnosis of BV by targeting several BV-related bacteria in a polymerase chain reaction (PCR); however, these studies evaluated separately the threshold concentrations of these bacteria. The purpose of this cross-sectional study was to assess *A. vaginae* and *G. vaginalis* concentrations in pregnant women of different age groups, gestational age groups, vaginal flora categories and HIV status and also to determine which combination of DNA threshold concentrations, rather than individually, best discriminated between bacterial vaginosis (BV) and non-BV categories.

Methods Pregnant women attending an antenatal clinic of a tertiary academic hospital in Pretoria, Gauteng, South Africa were enrolled in a cross-sectional study from July 2012 to December 2012. Self-collected vaginal swabs were obtained to detect BV with the Nugent scoring system and quantify *A. vaginae* and *G. vaginalis* DNA with a duplex quantitative real-time polymerase chain reaction (PCR) assay.

Results In 220 pregnant women, median concentrations of *A. vaginae* and *G. vaginalis* were not significantly different among various age groups (*A. vaginae* p=0.98 and *G. vaginalis* p=0.18) or different trimesters (*A. vaginae* p=0.31 and *G. vaginalis* p=0.19) but differed significantly among the vaginal flora categories (*A. vaginae* p<0.001 and *G. vaginalis* p<0.001) and HIV status (*A. vaginae* p<0.001 and *G. vaginalis* p=0.004). An *A. vaginae* DNA concentration of $\geq 10^7$ copies/mL together with a positive *G. vaginalis* result (≥10°Copies/mL) (i.e. AV_7GV_0) best discriminated between BV (39/220) and non-BV categories (181/220) with a sensitivity of 85% (95% CI 0.70 to 0.94) and a specificity of 82% (95% CI 0.76 to 0.88).

Conclusion Threshold concentrations for BV detection should be established for specific populations to ensure the development of tailored, sensitive molecular assays.

P3.156 CORRELATION OF THE EXPRESSION OF THE P16INK4A PROTEIN AND HPV DNA IN INDIVIDUALS WITH PENILE CANCER IN THE STATE OF GOIAS, BRAZIL

[1]Megmar AS Carneiro, [2]LA De Araújo, [3]HSCP De Paula, [4]VA Saddi, [5]SA Teles, [6]SH Rabelo-Santos, [3]AAP De Paula. [1]*Institute of Tropical Pathology and Public Health/Federal University of Goias, Goiânia, Brazil*; [2]*Institute of Tropical Pathology and Public Health/Federal University of Goias, Goiânia, Brazil*; [3]*Hospital Araújo Jorge, Goiania, Goias, Brazil*; [4]*Pontifical Catholic University of Goias, Goiania, Goias, Brazil*; [5]*Federal University of Goias, Goiânia – GO, Brazil*; [6]*Federal University of Goias, Goiãnia – GO, Brazil*

10.1136/sextrans-2017-053264.391

Introduction Penile carcinoma (PC) is a rare disease, however it is still considered a serious public health problem. The expression of p16INK4a, a protein associated with tumour suppression, can be used as a marker for the presence of high risk HPV DNA. The upregulation of this protein is understood to be an attempt to stop uncontrolled cellular proliferation in response to HPV infection.

Objectives The goal of this study was to estimate the prevalence of HPV DNA and evaluate the expression and correlation of p16INK4a with HPV DNA in patients with PC in Goias, Brazil. Methods: this retrospective cohort study involved 190 patients with PC treated in the UroOncology service of Hospital Araujo Jorge (HAJ), a unit of the Association Against Cancer in Goias (ACCG), from January 2003 to November 2015. The paraffin blocks containing the cancerous tissue fragments were subjected to extraction of viral DNA, subsequently subjected to polymerase chain reaction testing with short PCR fragment (SPF PCR) primers to detect HPV DNA. The marking of the p16INK4a protein was performed with immunohistochemistry, using a commercial kit (Mach 4 Universal HRPPolymer Detection System – Biocare Medical, CA, USA). The slides were evaluated independently by two pathologists.

Results Of the 190 samples tested, 89 (46.8%) (CI 95%: 39.8%–53.9%) showed positive HPV DNA and 98 (51.7.0%) (CI 95%: 33.2 to 53.2) showed expression of p16INK4a. The correlation between the presence of HPV DNA and p16INK4a was 63.6% (CI 95%: 46.3 to 78.6). Although there is no expression of p16INK4a in 100% of cases positive for HPVDNA, there was statistical significance between the presence of viral DNA and expression of p16INK4a (p<0.003).

Conclusion Some studies suggest that the standard knowledge of the expression of the p16INK4a protein may be a useful marker for HPV activity in patients with penile cancer. The results of this study showed that there are significant differences between the expression of this protein in positive and negative HPV DNA samples.

P3.157 DOES THE EUROPEAN GONOCOCCAL ANTIMICROBIAL SURVEILLANCE PROGRAMME (EURO-GASP) ACCURATELY REFLECT THE TRUE ANTIMICROBIAL RESISTANCE SITUATION IN EUROPE?

[1]Michelle Cole, [2]Gianfranco Spiteri, [2]Chantal Quinten, [1]Neil Woodford, [3]Magnus Unemo, [4]Euro-Gasp Network. [1]*National Infection Service, London, UK*; [2]*European Centre of Disease Prevention And Control, Stockholm – Sweden*; [3]*Örebro University Hospital, Örebro – Sweden*; [4]*European Centre of Disease Prevention, Stockholm – Sweden*

10.1136/sextrans-2017-053264.392

Sex Transm Infect: first published as 10.1136/sextrans-2017-053264.390 on 8 July 2017. Downloaded from http://sti.bmj.com/ on April 20, 2024 by guest. Protected by copyright.