Methods Retrospective review of women meeting CDC diagnostic criteria for "acute P.I.D." who completed a pain history questionnaire identifying symptoms strongly suggestive of endometriosis, namely:

1. Severe dysmenorrhoea interfering with schooling or work
2. Cyclical use of painkillers or heat application
3. Improvement on hormonal contraception
4. Cyclical dyschezia
5. Family history

Those who scored > 50% and whose symptoms failed to respond to hormonal treatment, were assessed by laparoscopy.

Results Of 149 women with high DSS, all tested negative for chlamydia by AptimaCombo2. 41 were referred to gynaecology, and 36 (aged 16–39, median 24y) had laparoscopy.

Of these, 23 had chlamydial antibody titre (CAT) measured, 4 were raised. 26/36 (72%) had endometriosis confirmed at laparoscopy including the four with raised CAT.

10/36 (28%) had no obvious signs of endometriosis or PID nor any other diagnosis.

Scores were similar in those with mild, moderate or severe endometriosis and the apparently disease-free group (mean score 87% & 85% respectively).

Conclusions

1. DSS is a simple means of excluding PID in women with acute pelvic pain and filtering appropriate referrals to gynaecology with high rates of endometriosis disease finding.
2. Laparoscopy may not identify exclusively uterine or rectovaginal endometriosis and negative cases remain under review.
3. DSS cannot predict disease extent due to "high end failure" as genuinely severe endometriosis is uncontrolled by hormonal contraception.
4. Dysmenorrhoea symptom scoring reliably identifies women who are likely to be given antibiotics for PID when they actually require hormones for endometriosis, and could improve specificity in patient selection for PID research.

P2.056 PREVALENCE OF *NEISSERIA GONORRHOEAE* SPECIMENS CONTAINING *POR A* PSEUDOGENE DELETION AMONG GONOCOCCAL RESISTANCE TO ANTIMICROBIALS SURVEILLANCE PROGRAMME (GRASP)SPECIMENS AT THE HEALTH PROTECTION AGENCY

doi:10.1136/sextrans-2013-051184.0321

[1]**M Toby**, [2]C Ison, [2]P Saunders. *[1]Guys and St Thomas' NHS Foundation Trust, London, UK; [2]Health Protection Agency, London, UK*

Background There has been an emergence of *Neisseria gonorrhoeae* strains which although phenotypically are indistinguishable from *N. gonorrhoeae,* vary in their genotype and require heightened surveillance. Isolates of *N. gonorrhoeae* were identified in Scotland, Australia and Sweden which lacked sequences in the *porA* pseudogene *(PAP)* and consequently gave false negative results in the *PAP* real-time polymerase chain reaction (RT-PCR) for *N. gonorrhoeae*. In 2011 two *PAP* negative isolates were found in England. We sought to determine the prevalence of *PAP* negative isolates amongst those received through the national surveillance programme, GRASP.

Method A screening protocol was devised which entailed using initial *PAP* testing followed by repeat *PAP* and confirmatory *opa* RT-PCR testing. Lysates prepared from isolates received for GRASP during 2011 were used. Any lysate with an initial *PAP* negative result was serially diluted to check for inhibition, then repeated on the original lysates and if still negative confirmed on a freshly prepared isolate direct from the archived isolate.

Results Of 156 GRASP lysates tested 146/156 (94%) were *PAP* positive, 10/156 (6%) samples were initially found to be *PAP* negative. On repeat testing however only a single isolate remained PAP negative when repeat *PAP* testing was performed on samples prepared from fresh culture.

Conclusion A single *PAP* negative specimen has been identified to date within GRASP, which potentially is carrying the menginococcal PorA. However confirmation by meningococcal PCR will be necessary.

P2.057 VERY EARLY INFANT DIAGNOSIS AND ART OUTCOMES IN KENYA

doi:10.1136/sextrans-2013-051184.0322

C Salil. *Information centre for HIV/AIDS and STI's, Eldoret, Kenya*

Background In resource limited settings, effectiveness of PMTCT programmes and ART outcomes in HIV infected neonates remains poorly documented. The study aimed at evaluating the efficacy of PMTCT programmes in 10 maternities in Kenya and to describe outcomes in HIV-infected neonates.

Methods HIV-exposed neonates were screened at birth at week 6. Heel prick samples of blood on DBS were used for DNA real time PCR testing. HI-RNA viral load and ARV drug resistance genotyping were done accordingly.

Results Between 2008 and 2011. 1,000 exposed neonates were screened for HIV infection. 60% were born from mothers on Tritherapy, 20% from mothers receiving dual AZT/sdNVP therapy, and 12% to mothers receiving only sdNVP. 70% of neonates received sdNVP at birth. All neonates were formula fed exclusively. Seven were diagnosed HIV+ at birth (Utero transmission rate = 0.91%). 55% were lost of 5 of follow up and 5 died before week 7. 15/900 were diagnosed positive at week 7 (peri partum transmission rate = 1.80%). 17/24 infected neonates started ART. Virological follow-up indicated that 8/11 reached undetected VL whereas 4/13, representing resistance to RTIs (one pre-ART, 2 Post ART), were in treatment failure. 9/22 (40.1%) infected-neonates were successfully treated.

Conclusion The study highlights the feasibility and interest of the very early infant diagnosis, illustrates the efficacy of PMTCT interventions and clearly points out the difficulties faced to treat effectively infected neonates.

P2.058 RAPID HIV TESTING IN THE PUBLIC HEALTH SETTING IN NORTH RHINE-WESTPHALIA, 2011–2012

doi:10.1136/sextrans-2013-051184.0323

[1]**A Lucht**, [1]D Münstermann, [1]H J Hagedorn, [1]C Tiemann, [2]S Kuttner-May. *[1]Labor Krone GbR, Bad Salzuflen, Germany; [2]Landeszentrum Gesundheit NRW, Münster, Germany*

Background North Rhine-Westphalia is the federal state with the highest number of HIV infections in Germany. The Landeszentrum Gesundheit (lzg.nrw) organises and supports anonymous HIV testing by 53 local public health authorities (LPHA). Aim of this study was to assess if offering additional rapid testing in the LPHA could attract hard-to-reach risk groups to HIV testing.

Methods After counselling, 24 LPHA offered their clients a rapid assay (RA; Vikia HIV 1/2, bioMérieux) alternatively to routine testing by a 4th generation HIV test (chemiluminiscent microparticle immunoassay, CMIA, Abbott) in a private laboratory (Labor Krone, Bad Salzuflen). Reactive tests were confirmed by immunoblot analysis and/or RT-PCR.

Results In 2011–2012, 24,623 clients were tested by CMIA in all 53 LPHA and 21,513 by RA in 24 LPHA. Among clients tested by CMIA there were 48.8% women, 50.5% men, median age was 31 years, 12.9% were men who have sex with men (MSM), 13.2% female sex workers (FSW). Among RA clients there were 39.2% female, 60.5% male, 73.9% belong to the age range of 20–39 years, 13.9% MSM, 0.7% FSW. In the CMIA, 1.2% of the samples were reactive versus 0.6% in RA. Overall, 0.8% of LPHA clients were

confirmed HIV-positive. Specificity was high (> 99.8%) for both tests. Four early infections could only be detected by CMIA and confirmed by RT-PCR whereas RA and immunoblot analysis were still negative.

Discussion Approximately half of the LPHA in NRW offered their clients the RA. Clients deciding for RA were slightly different according to age, gender, risk behaviour and HIV status. It could not be shown so far that by offering RAs the LPHA attracted special risk groups which might otherwise not have been tested for HIV. It needs to be considered that some early HIV infections could be detected by CMIA but not by RA.

P2.059 EVALUATION OF A 2ND GENERATION REAL TIME PCR SYSTEM FOR DIAGNOSIS OF *CHLAMYDIA TRACHOMATIS*: IMPACT ON LABORATORY WORKFLOW

doi:10.1136/sextrans-2013-051184.0324

D De Maria, M D'Autilia, **M A Latino.** *S.S. of Bacteriology, O.I.R.M. - Sant'Anna Hospital, Turin, Italy*

Background The aim of this study was to evaluate the performance and the impact on laboratory workflow of Cepheid Xpert CT, a new generation of Real Time PCR test that provides results in 90 min, with only 2 min of hands on time in comparison with traditional molecular method used (Alert q-PCR ELItech, Nanogen).

Methods 101 selected women (< 25 and; 15% > 25 years old with risk factors) have been enrolled for this evaluation**.** Performances and laboratory workflow were compared: Xpert CT was run on GeneXpert System and Alert q-PCR on ABI 7300 (Life Technologies). Residual samples (500 uL UTM endocervical swabs) previously tested with Alert q-PCR have been used for the Xpert CT assay.

Results On a total of 101 samples, 98 were concordant and 3 were discordant: 2 were positive with Xpert CT and negative for Alert q-PCR and 1 was positive with Alert q-PCR and negative with Xpert CT. It was appreciated the value of Sample Adequacy Control (SAC) in Xpert CT, that presented low Ct value (below 20) in case of severe infection. *Laboratory Workflow*: GeneXpert® steps n = 23 for extraction, amplification and detection (the whole RT-PCR process happened inside the cartridge), TAT 90 min. Alert q-PCR for a run of 24 samples: extraction steps n = 253, amplification and detection steps n = 286, hands on time 70 min, extraction 55 min, amplification and detection 2h, TAT 4 h.

Conclusions GX simplified the laboratory workflow ensuring standardisation, accuracy and reliability of analytical data. The value of SAC supports the quality of sampling to avoid false negative results due to insufficient cells detected. Need evaluation for discrepancy results.

P2.060 MULTIPLEX REAL-TIME PCR FOR THE SIMULTANEOUS DETECTION OF 7 SEXUALLY TRANSMITTED PATHOGENS REVEALS A HIGH RATE OF MULTIPLE INFECTIONS

doi:10.1136/sextrans-2013-051184.0325

[1]D Danioth, [2]M Affolter, [3]F Imeri, [1]**M Altwegg**. *[1]Bioanalytica, Lucerne, Switzerland; [2]MCL Medical Laboratories, Berne, Switzerland; [3]Laborgemeinschaft 1, Zurich, Switzerland*

Background Sexually transmitted infections are caused by a relatively well defined group of pathogens. Their individual detection using cultural and molecular techniques is time-consuming and costly. Multiplex real-time PCR is a rapid and more cost-effective alternative and allows the detection of multiple infections.

Methods We have validated the Anyplex II™ STI-7, a semiquantitative, highly multiplexed real-time PCR kit (Seegene), using a selection of specimens positive by routine methods (culture, PCR, cytology) for at least one of the 7 different targets. Specimens were assumed to be negative for those parameters not previously tested. DNA was isolated using the easyMAG® (bioMérieux) followed by melting curve analysis-based PCR on a CFX96™ thermocycler (Bio-Rad) and automatic data interpretation with the Seegene Viewer software. Discrepant results were resolved with independent molecular tests.

Results Resolved results showed 100% sensitivity and specificity for *Chlamydia trachomatis* (17 positive/73 negative specimens), *Neisseria gonorrhoeae* (13/71), *Trichomonas vaginalis* (6/84), *Mycoplasma genitalium* (18/72) and *Mycoplasma hominis* (30/60). For *Ureaplasma* species (57/30) 100% sensitivity and 93.3% specificity were observed. The STI-7 test (the only test capable of separating the two major species) revealed that among the 57 *Ureaplasma*-positive specimens 7 (12.3%) were positive for *U. urealyticum*, 39 (68.4%) for *U. parvum* and 11 (19.3%) for both species. Often, 2 or more targets were detected, e.g. of the 17 *C. trachomatis*-positive specimens 8 were positive for 1 and 7 for 2 additional organisms. Ureaplasmas were the most prevalent species being present in about 2/3 of the specimens.

Conclusion We conclude that the STI-7 multiplex PCR is a rapid and reliable test for the simultaneous detection of the most important sexually transmitted pathogens providing an efficient means for a more thorough evaluation of the clinical significance of the various organisms.

P2.061 ACCURACY OF SYNDROMIC DIAGNOSIS (SD) FOR VAGINAL DYSCHARGE AND CERVICITIS IN WOMEN OF REPRODUCTIVE AGE IN BOGOTA, COLOMBIA

doi:10.1136/sextrans-2013-051184.0326

[1]J Tolosa, [2]A Rodriguez, [3]E Angel Muller, [4]A Ruiz Parra, [5]**H Gaitan Duarte**. *[1]Oregon and Health Science University., Portland, OR, United States; [2]Clinical Research Institute, Universidad Nacional de Colombia, Bogota, Colombia; [3]Department of Obstetrics and Gynecology, Universidad Nacional de Colombia, Bogota, Colombia; [4]Clinical Research Institute, Universidad Nacional de Colombia, Bogota, Colombia; [5]Clinical Research Institute, Clinical Research Institute, Universidad Nacional de Colombia, Bogota, Colombia*

Objective Determine the diagnostic accuracy of the symptoms and signs used in the syndromic diagnosis of low genital tract infections (LGTIs) in symptomatic women.

Materials and Methods: A diagnostic validity study of sexually active women (14–49 years old) consulting with symptoms of LGTI at three outpatient facilities in Bogota, Colombia were recruited in 2010. Exclusion criteria: hysterectomy, pregnancy or antibiotics in the 7 previous days. Symptoms and signs and syndromic diagnosis were evaluated by a physician for two syndromes: Vaginal discharge caused by Bacterial vaginosis (BV) Candida albicans (CA) and Trichomonas vaginalis (TV) and Cervicitis caused by N. gonorrhoeae (NG), and C trachomatis (CT). Those were compared against PCR for CT and NG; Nugent's criteria for BV; wet smear for TV and blood agar culture for CA. Sensitivity, specificity, LR (+), LR (-) for each syndrome and its symptoms and signs were calculated

Results 1372 subjects were evaluated. The prevalence of NG and CT was 1.3% (18/1372) and 9.1% (125/1372); for BV, TV and CA infection was 39.9% (548/1372), 0.8% (11/1372) and 11.1% (152/1372). Sensitivity and Specificity are for syndromic approach for cervicitis 13.3%(CI 95 8.2–20) and 90.9% (CI95 89.1–92.4) respectively. Vaginal discharge is the sign with the most sensitivity for cervicitis and BV, TV and CA infections: 93% and 78%, respectively. In cervicitis, the most specific sign is mucopurulent cervical discharge (91.8%) and for BV, TV and CA infections is erythema valvular (68%).

Conclusions SD for vaginal discharge syndrome has a high sensitivity and a low specificity resulting in a high rate of unnecessary antibiotic treatment (64.9%). SD for cervicitis, has a low sensitivity and high specificity resulting in a high % of false negatives and lack of needed antibiotic treatment in 86.7%. SD alone is an ineffective strategy for LGTIs.