Poster presentations

Results Over the study period, 1533 female patients were tested for TV using the rapid test, of which 539 (35.2%) were Black, with a median age of 28 years (range 6–82 years). The TV positivity rate based on the rapid test was 5.6% (86/1533), compared to 3.2% (54/1681) among those tested with WM. Among 77 unique female patients with TV infection, 467 (34.0%) were Black and had a median age of 28 years. Nearly half of infected women presented with a chief complaint of abdominal pain (49%); vaginal discharge was only reported by 10%. Among infected women, 55% had concomitant bacterial vaginosis (BV), and 16% were co-infected with gonorrhoea and/or chlamydia. Most infected women (84%) were prescribed metronidazole during the same ER visit.

Conclusions . The OSOM® Trichomonas Rapid Test resulted in a 60% increase in TV detection among women compared to WM, and the majority received appropriate TV therapy. Women identified with TV infection in an ER setting were primarily co-infected with BV and other STIs.

P2.078

DRUG RESISTANCE OF MYCOBACTERIUM TUBERCULOSIS AT PATIENTS WITH COMBINATION OF TUBERCULOSIS AND THE HIV INFECTION

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Purpose To estimate of drug resistances of (MBT) at patients with combination of tuberculosis and the HIV (TB+HIV).

Materials and Methods Patients with confection treated in tubercular hospital N^0 2 for the period of 2005–2011

Results For the specified period the among patients with TB+HIV the share of low immune status (less than 200 cell/mkl), causing severe TB has increased from 32.5% up to 60.4%. It was accompanied by growth generalised forms of TB from 30.1% up to 56.5%.

MBT excreting it has been identified at 67.7% TB+HIV cases, and in 53.2% cases baccilar TB have been revealed by culture. From them only at 19.9% of MBT were sensitive to antitubercular drugs, at others tests identified presence of resistance of various prevalence. Resistance to streptomycin (73.2%) and izoniasid 73.4% was more often, it is a little bit less - to rifampicin - than 63.3%, and ethambutol - 41.2%. Among second line TB drugs the greatest resistance has been fixed to canamycin - 36.7%, to other drugs of this group it did not exceed 20%.

The proportion of patients with multi drug resistant MBT has determined in an interval of 80.6% of - 65.3%; among patients with new cases of TB it was on the average 73.3%. Extremely drug resistant MBT (XDR) has registered among for the new cases within 7.9% - 14.8%. Patients with XDR had expressed immune suppression and progressing of tuberculosis with development generalised forms even at use of ART. Lethal outcomes at them made 56.9%.

Conclusion wide circulation of multi and extremely drug resistant MBT at patients with TB+HIV makes inefficient treatment at prescription of f standard TB schemes. Besides for these patients use of methods of fast identification of drug resistance is necessary.

P2 079

WITHDRAWN BY AUTHOR

P2.080

DIVERSITY OF NEISSERIA GONORRHOEAE ANTIMICROBIAL SUSCEPTIBILITY TESTING METHODOLOGIES IN THE UNITED KINGDOM

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Background Appropriate and timely treatment for *Neisseria gonor-rhoeae* infection is an essential clinical and public health action. Antimicrobial susceptibility testing (AST) predicts therapeutic failure and guides selection of appropriate treatment.

Increasing antimicrobial resistance in *N. gonorrhoeae* prompted the publication of the global action plan by the World Health Organisation to control its spread. This document highlighted the lack of or use of different methodologies for AST making the inter-laboratories and international comparisons and monitoring difficult.

Aims The aim of this study was to explore whether laboratories offered AST for N. gonorrhoeae and which methodologies were being used to detect resistance particularly to current recommended treatment.

Methods A web based survey with 23 questions regarding AST was developed and rolled out to the members of British Society for Microbiology Technology and UK Standards for Microbiology Investigations from November 2012 to January 2013.

Results There were 327 responses from 118 laboratories from across the UK. After excluding duplicate and empty responses, 206 responses were analysed.

196 respondents (95%) conducted AST for *N. gonorrhoeae* with 46% performing this daily. 147 respondents (75%) used British Society of Antimicrobial Chemotherapy method and 8% used European Committee on Antimicrobial Susceptibility Testing breakpoints. 80% respondents always tested penicillin susceptibility, 71% always tested ceftriaxone and 55% always tested azithromycin. The most common methods used were disc diffusion (73% respondents) and E-test (48% respondents). 26% respondents did not archive isolates with potentially decreased susceptibility to cephalosporins and 19% did not use control strains for AST.

Conclusion This study highlights the diversity in approach to AST by different laboratories across the UK. Ceftriaxone and azithromycin, the antibiotics of choice for uncomplicated anogenital infections, were not consistently tested. AST is the basis for detecting resistance and modifying therapy accordingly and a consistent approach is required for both patient treatment and surveillance.

P2.081

ANTIMICROBIAL SUSCEPTIBILITIES OF NEISSERIA GONORRHOEAE STRAINS FROM MALE URETHRITIS IN JAPAN -THE FIRST NATIONAL SURVEILLANCE

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Background *Neisseria gonorrhoeae* is one of the most important pathogens causing sexually transmitted infection. Resistant *N. gonorrhoeae* trains against several antimicrobials are increasing worldwide

Purpose In this study, the trends of antimicrobial susceptibilities among *N. gonorrhoeae* strains isolated from male patients with urethritis were investigated as the first Japanese national surveillance, which was conducted by the surveillance committee of three Japanese societies as Japanese Society of Chemotherapy, Japanese Association of Infectious Diseases and Japanese Society of Clinical Microbiology.

Methods The targets were male patients older than 16 years with urethral discharge and symptoms of urethritis. The patients were diagnosed with gonococcal urethritis by a clinician at 51 participating facilities. The period of specimen collection was between April 2009 and October 2010.

Results Of the 156 specimens, 83 *N. gonorrhoeae* strains were tested for antimicrobial susceptibilities to 18 agents. The prevalence of β -lactamase producing strains and chromosomally-mediated resistant strains were 7.2% and 16.5%, respectively. Against cepharosporins, one strain was resistant to cefixime with MIC $0.5 \,\mu g/ml$. There was not resistant strain to ceftriaxone, but the 7 strains (8.4%) had MIC 0.125 μ g/ml. The MIC of fluoroquinolones to all strains showed a bimodal distribution. The values of MIC90 of ciprofloxacin and levofloxacin were 16 and 8 µg/ml, respectively. Sitafloxacin, one of fluoroquinolones had strong activity to N. gonorrhoeae strains and the value of MIC90 was $0.25 \,\mu g/ml$. The MIC of azithromycin in 2 strains was 2 µg/ml, but no high-level resistance to macrolides was detected.

Conclusion The first national surveillance for antimicrobial susceptibilities of N. gonorrhoeae was performed. Fluoroquinolone-resistance N. gonorrhoeae strains were spread in Japan. The resistant rate of azithromycin resistant was 2.4%.

P2.082 **POST-TREATMENT DETECTION OF AZITHROMYCIN IN HIGH-**VAGINAL SWABS USING LIQUID CHROMATOGRAPHY AND TANDEM MASS SPECTROMETRY (LC-MS/MS)

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Introduction Recent data have raised questions over the efficacy of azithromycin 1g for the treatment of chlamydia infection. In order to measure effective absorption, we developed a protocol to quantify the concentration of azithromycin using liquid chromatography and tandem mass spectrometry (LC-MS/MS) in self-collected high-vaginal swabs.

Methods Ten healthy women were asked to self-collect a highvaginal swab (baseline) prior to taking a 1g dose of azithromycin. A blood sample was collected four hours later to determine plasma concentrations of azithromycin. Participants then self-collected a high vaginal swab each day for a further 9 days. All swabs were preserved in 1ml of 100% Methanol and stored at -80°C prior to analysis. One ml of chloroform containing 10mg/ml of Leucine enkephalin as an internal standard was added to extract azithromycin. Azithromycin concentrations were calculated using a validated LC-MS/MS method. Data were normalised to the internal standard and to membrane lipid concentrations, measured in the same samples using LC-MS/MS.

Results Azithromycin was detected at varying concentrations in all 10 women in all post-treatment samples. The highest average normalised azithromycin concentration of 953ng/ml (range = 267– 2200ng/ml, standard error of mean (sem) = 181ng/ml) was detected on day 2 post-treatment. The lowest average azithromycin concentration was 164 ng/ml (range = 51-387 ng/ml, sem = 42 ng/ml), 9 days post-treatment. The average concentration of azithromycin detected in blood samples was 339ng/ml (range = 107-628ng/ml, sem = 57ng/ml). In 9/10 women azithromycin concentrations remained above 64ng/ml, the hypothesised mean inhibitory concentration (MIC) of azithromycin for chlamydia, for the entire 9

Conclusion We have validated a method for detecting the azithromycin concentration in self-collected high-vaginal samples using LC-MS/MS. Azithromycin concentrations remained above the reported MIC of 64ng/ml for up to 9 days post-treatment in highvaginal swabs from 10 healthy women.

P2.083

A COMPARATIVE EFFICACY OF NIFURATEL AND **METRONIDAZOLE IN THERAPY OF BACTERIAL VAGINOSIS ASSOCIATED WITH ATOPOBIUM VAGINAE**

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Purpose To evaluate the efficacy of nifuratel plus nystatin combination in the treatment of patients with bacterial vaginosis (BV) associated with A. vaginae.

Methods A prospective comparative study on the clinical efficacy, safety and tolerability of nifuratel plus nystatin combination was performed in patients with A. vaginae-associated BV. A total of 197 women meeting the inclusion/exclusion criteria and 20 healthy women (the control group) were examined. BV was diagnosed in 148 out of 197 women with vaginal discharge (according to Amsel criteria). The diagnosis of BV was not confirmed in 49 patients and they were excluded from the study. Patients were randomised to receive intravaginal treatment with suppositories containing a combination of nifuratel (500 mg) and nystatin (200,000 IU) at night for 8 days (group 1) or standard treatment with suppositories containing metronidazole (500 mg) twice daily (in the morning and at night) for 10 consecutive days (group 2). Treatment results in both groups were compared one week after the end of therapy. Control test of cure with respect to A. vaginae was carried out by PCR one month after the end of therapy.

Results PCR assay detected A. vaginae in 83 (56%) out of 148 BV cases and in none from the control group (p < 0.01). In patients with A. vaginae-associated BV efficacy of the nifuratel plus nystatin combination was 90.3%, while standard metronidazole therapy was ineffective (cure in only 10% of cases).

Conclusion A. vaginae may be an additional marker of BV. Combination of nifuratel with nystatin was much more effective than standard intravaginal administration of metronidazole in the treatment of A. vaginae-associated BV.

l P2.084 l

A CASE OF RAPID CLEARANCE OF PENILE BOWENOID PAPULOSIS WITH IMIQUIMOD CREAM

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Introduction Bowenoid papulosis is a form of penile intraepithelial neoplasia associated with the oncogenic human papilloma virus (HPV) strains 16, 18, 31 and 33. It occurs in young sexually active patients and has a low risk of progressing to invasive squamous cell

Case report The patient was a 31 year old chinese male who presented with a 3 month pruritic rash over his glans penis. Previous treatment with hydrocortisone cream had caused more lesions to appear and was stopped.

On examination, there were multiple erythematous discrete papules over the glans penis and a cluster of papules at the inner prepuce. A skin biopsy was consistent with bowenoid papulosis showing a thickened epidermis with full thickness atypical keratinocytes with loss of normal polarity. A band like infiltrate of lymphocytes, plasma cells and eosinophils was present within the dermis. The rest of his sexually transmitted infection screen including syphilis serology and human immunodeficiency virus tests were

He was started on topical imiquimod three applications per week and noted complete clearance of the prepuce lesions after two