Background As part of an on-going STI microbiological surveillance programme, we investigated associations between Chlamydia trachomatis infection and the demographic, clinical, microbiological and behavioural characteristics of patients presenting with either male urethral discharge syndrome (MUDS) or vaginal discharge syndrome (VDS) to a public healthcare facility in Johannesburg, South Africa.

Methods 1,218 MUDS and 1,232 VDS cases were consecutively recruited during 6 annual surveys, starting in 2007. Genital discharge pathogens were detected using a molecular assay for N. gonorrhoeae, Chlamydia trachomatis, Trichomonas vaginalis, Mycoplasma genitalium and by microscopy of vaginal smears (bacterial vaginosis, Candida). Serology was used to detect syphilis, HSV-2 and HIV infections. Chi-squared tests and logistic regression analyses were used to identify predictors of C. trachomatis infection.

Results Overall, 286 (23.5%) men and 197 (16.0%) women were C. trachomatis positive, with the highest prevalence observed in men (30.5%) and women (25.9%) aged 20–24 years. In the multivariate analysis, C. trachomatis was less likely to be detected in MUDS patients co-infected with N. gonorrhoeae (aOR 0.36, 95% CI, 0.26–0.49) and HSV-2 (aOR 0.70, 95% CI, 0.51–0.91) as well as patients who had received antibiotics recently (aOR 0.43, 95% CI, 0.20–0.91). In contrast, the likelihood of C. trachomatis infection was higher in VDS patients co-infected with either N. gonorrhoeae (aOR 2.22, 95% CI, 1.48–3.32) or M. genitalium (aOR 2.24, 95% CI, 1.45–3.47) infection but lower in women who were older (aOR 0.68, 95% CI 0.60–0.77) or who had Candida morphotypes detected (aOR 0.66, 95% CI 0.44–0.98).

Conclusion The increased likelihood of co-existent gonococcal or M. genitalium infections, but the decreased likelihood of Candida infection, in women with VDS-associated chlamydial infection suggests that these women are at higher risk of STIs, and potentially HIV. Paradoxically, gonococcal infection as well as recent antibiotic use, reduced the likelihood of MUDS patients having chlamydial infection.

Conclusion As in previous successful ECCG surveys the 2013 ECCG survey on the diagnosis and management of chlamydial infections includes a particular focus on areas where international guidance is currently lacking or poorly detailed. The ECCG has also recently expanded into parts of Eastern Europe and will be able to present data on STI care from this area for the first time.

In this prospective, observational study, we analysed clinical features and treatments between January, 1 2011 and March, 31 2011 of patients consulting for EGWs in 15 STI clinics through France. 372 males and 111 women were included; mean age 31.2 years old. Women were younger than men (31.7 and 28.9 y.o respectively p < 0.05). 414 (35.7%) were heterosexual, 13 bisexuals and 54 (11.2%) homosexuals; mean age at first sexual intercourse: 17 y.o. Males reported more sex partners in the last 12 months (more than 3 partners in 32.6% versus 11.9% p < 0.01). In males, 250 had an involvement of the penis alone and 46 had an involvement of the anus alone. 76 patients had EGWs of the anus, among them 26 were MSM. In females, 76 had an infection of the vulva alone and 22 a co-infection vulva and anus. Concerning cervical cancer screening, 13 had never been tested (mean age 24.8 y.o. [17–40]); mean delay for the last screening: 12 months [1–108]. Three women have been vaccinated against HPV. 3 males were newly diagnosed HIV positives and 8 for syphilis (7 were MSM RR: 50). In females, 2 patients were HIV positives and 13% had an infection by Chlamydia trachomatis (11/84 not known: 27). Women were significantly more treated with Imiquimod (35% Vs 19.9% p < 0.001).