BV in Indian women. This study examined the risk factors for persistent bacterial vaginosis in young reproductive women in India.
Study Design Between November 2005 and January 2007, a prospective cohort study was carried out to examine the relationship of BV and HSV-2 acquisition among women in Mysore. Quarterly, data were collected on sociodemographics, risk behaviour, partner characteristics, followed by a physical examination to diagnose and treat reproductive tract infections. BV was defined using Nugent scoring of gram stained vaginal smears. Persistent BV was calculated using generalised estimating equation methods. Women gave informed consent prior to enrolment in the study.
Results Of the 420 women for which there were data available for all three visits, 114 (27%) had two or more BV episodes. Women with a history of 2 or more BV episodes were more likely to be infected with *Trichomonas vaginalis* [OR 72.93, 95% CI 9.69 to 548.4] and be diagnosed with HSV-2 infection [OR 2.58, 95% CI 1.44 to 4.63] compared to women with no BV history. Women with a history of BV were also more likely to report no education, tubal ligation, being a non-Muslim, and having a sex partner who had other sex partners.
Conclusions Young reproductive age women in India have a high persistence of BV. Although the association between BV and *Trichomonas vaginalis* is unclear, it seems prudent to recommend that women with BV or TV be screened for both infections.

P3-S7.12 INFECTIONS AND INTERVENTIONS IN PREGNANT WOMEN AT HIGH RISK OF PRETERM BIRTH: A COHORT STUDY

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Background Preterm birth (PTB) accounts for 65% neonatal deaths and 50% neurological disability in children. Prior spontaneous PTB is the highest risk factor for subsequent PTB and is usually associated with sub-clinical infection, possibly due to genetic polymorphisms of proinflammatory cytokines. Bacterial vaginosis (BV) has been implicated in PTB and early treatment may reduce it but less attention has been paid to other infections. We assessed the infective and obstetric complications in a group of pregnant women at high risk of PTB and the interventions to reduce PTB.
Methods Study group: Pregnant women at high risk of PTB Interventions: Microbiological screening for infections from beginning of second trimester then 4-weekly until 28 weeks gestation with treatment of infections found; 2-weekly ultrasound assessment of cervical length during second trimester with cerclage and progesterone injections if needed. Outcome: Gestational age at delivery.
Results We have managed 104 pregnancies in 95 multiparous women who had at least one previous mid-trimester miscarriage (MTM), PTB or stillbirth due to chorioamnionitis. 21% had two previous MTM and/or PTB; 5% had three; 4% had four and 1% had five MTM/PTB. 75% were of white ethnicity, 7% asian, 18% black. One or more infection was identified in 51 (49%) of the pregnancies; Group B streptococcal infection (GBS) in 21%, BV in 16%, *S aureus* in 3%, heavy growth vaginal or urinary coliforms in 16%. Prevalence of infections was more frequent in black (68%), than white (48%), than asian (14%) women. Pregnancy outcome: Exact gestational age unknown in 4 due to transfer to different hospital when >28/40 gestation so outcomes for 100 pregnancies. Four resulted in MTM leaving 96 viable pregnancies. Gestational age at delivery: 24–27/40 in 3%; 28–31/40 in 3%; 32–37/40 in 13%, term in 81%. There was no association with treated infection and pregnancy outcome, infections had been identified and treated in 39% of PTBs and 50% of term births.
Conclusions In this group of women with high risk pregnancies, 49% had infections known to be associated with PTB which were treated in the second trimester. The overall PTB rate was 19% with 6% extremely or very preterm. There was no association between treated infection in pregnancy and PTB. Although the PTB rates are higher than the normal obstetric population they are significantly lower than would be predicted for such high risk pregnancies.

P3-S7.13 EVALUATION OF THE AFFIRM VPIII MICROBIAL IDENTIFICATIONS TEST FOR THE DIAGNOSIS OF VAGINITIS AND BACTERIAL VAGINOSIS

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Background Vaginitis and bacterial vaginosis (BV) are the most prevalent causes of vaginal symptoms among women of childbearing age. Diagnosis is based on clinical signs and symptoms, microscopy, pH and the whiff" test, and laboratory performed tests. The Affirm VPIII Microbial Identification test (Becton Dickinson) incorporates non-amplified DNA probes for *Candida spp.*, *Trichomonas vaginalis* and *Gardnerella vaginalis* as an indicator for BV.
Objective To compare the Affirm VPIII Microbial Identification test for the detection of *Candida spp.*, *Gardnerella vaginalis* and *Trichomonas vaginalis* to graded Gram stain for Bacterial Vaginosis and yeast as well as to an in-house *Trichomonas vaginalis* PCR (Polymerase Chain Reaction).
Methods In this study, specimens from 191 patients were evaluated. Specimens were collected consecutively from patients with vaginal discharge syndrome presenting at an STI (Sexually transmitted infection) clinic in Gauteng, South Africa between May 2010 and February 2011. Study inclusion was dependent upon the request and collection of both a vaginal swab for Affirm VP III and a second swab to make a smear for Gram staining. A cervical swab specimen was also collected for PCR at the same visit. Graded Gram stain for Bacterial vaginosis and yeast as well as an in-house real-time PCR method on the Rotorgene platform was performed in the laboratory. The sensitivity and specificity of the assay was determined using the graded Gram staining as a gold standard for BV and *Candida spp.*. The real-time PCR was the gold standard for the *Trichomonas vaginalis* (TV).
Results Analysis of the Affirm VPIII gave a sensitivity of 98% for BV correctly categorising 80of the 82 BV positive specimens and specificity of 76% correctly identifying 38 of the 50 BV- negative specimens. The Affirm VPIII for Candida yielded a sensitivity of 86% and specificity of 95%. When the Affirm was compared to the Real-time TV PCR the sensitivity was at 45% and specificity at 99%.
Conclusion The Affirm VPIII is an objective system which detects mixed vaginal infections and can be used in any setting. The performance characteristics of the Affirm VPIII for BV and Candida were comparable to those of other published studies. However in this study the Trichomonas vaginalis PCR was used as a gold standard therefore the sensitivity of the Affirm VPII of 45% is similar to that of culture or wet mount.

P3-S7.14 THE ASSOCIATION OF *UREAPLASMA UREALYTICUM* WITH MALE NON-GONOCOCCAL URETHRITIS

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Background The aetiology of non-gonococcal urethritis (NGU) is unexplained in 30–50% of cases. The role of ureaplasmas is not