THE RELATIONSHIP BETWEEN UREAPLASMA UREALYTICUM INFECTION IN THE GENITAL TRACT AND SEMEN QUALITY. *E-S Gao, J-Q Wu, C-L Liang, X-K Chen (Shanghai Institute of Planned Parenthood Research, Shanghai, CHINA)

To study whether Ureaplasma Urealyticum infection in the men genital tract reduced the semen quality. The study was designed as a cross-sectional epidemiological survey, combined with laboratory experiment. Two hospitals in Shanghai city, China were chosen as study fields and 346 eligible patients were consecutively enrolled as subjects. The five semen indicators of the eligible subjects were analyzed in order to assess the semen quality. All subjects accepted external genital examination and semen analysis. The statistical methods applied in this study included: X2 test, general linear model, mixed linear model, analysis of covariance, factorial analysis, multiple linear regression, logistic regression, and principal component analysis. Results: 1) The proportion of higher semen viscosity in men with UU infection (12.50%) was significantly higher than that in men without UU infection (4.76%) (P=0.0.1). 2) Male genital tract UU infection was associated with declined sperm counts (P<0.0.1). Results from trend y2 analysis showed sperm concentration inclined to lower level in subjects with UU infection. 3) The unadjusted OR of teratospermia in UU positive subjects was 1.88 (95%CI: 0.79-4.50), compared with the UU negative subjects. When some factors such as centers, history of souse pregnancy and frequency of sexual activity were adjusted, thus the adjusted OR increased to 2.65 (95%CI: 0.88-8.54). 4) In addition, our results showed that lower socioeconomic characteristics, younger age of starting smoking, alcohol intake, and higher frequency of recent sexual activity were associated with higher UU infection rate. The study results showed UU infection of male genital tract could negatively influence the semen quality. UU infection was associated with higher semen viscosity and lower semen PH value. Sperm concentration was lower in UU positive subjects than that in UU negative subjects. However UU did not significantly affect other semen quality indexes.


Background: Little is currently known about congenital anomalies in Canadian ethnic populations. This study examines birth prevalence of congenital anomalies in Chinese and non-Chinese live births in Alberta, 1983–2003. Methods: We included all data from the population-based registries of congenital anomalies and live births in Alberta between January 1983 and December 2003. Chinese were identified using a validated Chinese surname list. Cases in live births were matched to the birth registry by year and birth registration number, with over 99.8% of success. The odds ratio (OR) of all anomalies and each specific section/group (n=55) for Chinese was calculated using logistic regression, adjusting for maternal age, low birth weight, pre-term birth, rural residence, marital status, parity, history of still birth, and year of birth. Results: Of the 847,550 live births in 1983–2003, 21,739 (2.6%) were Chinese. Overall, live birth prevalence of all anomalies for Chinese (30.9/1000) was lower than for other Canadians (36.3/1000). Compared to other Canadians, Chinese had a lower likelihood of live birth prevalence for all anomalies combined (ORadj=0.77, 95%CI=0.71-0.85), nervous system anomalies (ORadj=0.64, 95%CI=0.43-0.96), digestive system anomalies (ORadj=0.54, 95%CI=0.37-0.79), genital organ anomalies (ORadj=0.64, 95%CI=0.51-0.80), urinary system anomalies (ORadj=0.60, 95%CI=0.42-0.86), musculoskeletal system anomalies (ORadj=0.63, 95%CI=0.54-0.74) and Down syndrome (ORadj=0.59, 95%CI=0.37-0.92), but higher for eye/ear/face/neck anomalies (ORadj=1.33, 95%CI=1.10-1.61) and cleft palate +/- cleft lip (ORadj=1.46, 95%CI=1.02-2.08). Chinese babies were more likely to be low birth weight and born to mothers age 35 years and over, but less likely to be born as pre-term (P<0.001). Conclusions: There are significant differences in live birth prevalence of congenital anomalies between Chinese and non-Chinese newborns. Further examination may lead to better understanding of such differences and aid in the development of strategies for prevention.

RISK FACTORS OF ABRuptIO PLACENTAE AMong PERUVian WOMEN. *S E Sanchez, P Pacora, J H Farfan, A Fernandez, C Qiu, C V Ananth, M A Williams (University of Washington, Seattle, WA 98195)

OBJECTIVE: Abruptio placentae, the premature separation of a normally implanted placenta from the uterine wall, occurs in approximately 1.0% of pregnancies and is a significant cause of maternal and perinatal morbidity, and infant mortality. Little is known about the risk factors of this complication, particularly in South American populations. We examined the relation of maternal socio-demographic, medical, and behavioral characteristics with risk of abruptio placentae in Peruvian women. METHODS: This case-control study included 255 abruptio placentae cases and pregnant 258 controls. Multivariable logistic regression models were fit to calculate odds ratios (OR) and 95% confidence intervals (CI) adjusted for putative abruptio placentae risk factors. RESULTS: History of delivering a stillborn infant (OR=10.0; 4.0-25.2), having the index pregnancy complicated by preeclampsia/eclampsia (OR=3.7; 2.2-6.3); and a low rate of weight gain during pregnancy (i.e., <0.15 kg/week) (OR=2.5; 1.3-4.7), were associated with statistically significant increased risk of abruptio placentae. Women who had mid-arm circumference values between 22-27.9 cm, had an increased risk of abruptio placentae compared with women who had values in the lowest decile (<22 cm) or highest decile (≥28 cm). Advanced maternal age, low educational attainment, male infant gender, cigarette smoking and grand multiparity were not risk factors of abruptio placentae in this population. CONCLUSION: Some clinical risk factors identified in this study are similar to those reported in other populations. Inferences concerning abruptio placentae risk in relation to factors such as maternal cigarette smoking were limited by the low exposure frequencies among Peruvian women.


Bacterial vaginosis (BV) has been linked to various adverse reproductive events including endometriosis, preterm delivery, and premature rupture of the membranes (PROM). Prior studies, with extremely small sample sizes, have also linked BV to spontaneous abortion (SAB). We conducted a large prospective cohort study enrolling women in the first trimester of pregnancy to examine the role of BV and SAB. We were particularly interested in the examination of first trimester BV, behaviors and conditions which may promote ascension of BV to the upper genital tract, and SAB after adjusting for confounding factors. Generalized linear models were used to determine if the association between BV and SAB could be attributed to potential confounding factors. BV was entered into the model as a time varying covariate recognizing the differential BV diagnosis of study participants by gestational age of entry into the study. BV was identified by Gram stain. Seven percent of women experienced a SAB (n=132) and 40% were positive for BV; BV status did not differ between women experiencing a SAB and women maintaining their pregnancy (39.5% vs. 39.3%). Women experiencing a SAB were younger, more likely to be primigravid, report a prior ectopic pregnancy, a prior PROM, and a prior pregnancy affected by BV. In addition, women with a SAB were more likely to smoke, drink alcohol and report an incompetent cervix. Ever and current douching, prior and current STD’s and current stress were similar between the two groups. The finding of no association between BV and SAB remained after adjusting for confounding factors and behaviors promoting ascension of BV (i.e. douching, incompetent cervix, stress) (RR: 1.22, 95% CI: 0.85 – 1.76). These data do not support a causal relationship between BV and SAB.

* = Presenter; S = The work was completed while the presenter was a student