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***Chlamydia trachomatis*: Wrong target for sexually transmitted diseases (STD) in Hong Kong**

Chlamydia trachomatis (CT) is an obligate intracellular human pathogen. It is prevalent in western countries like USA and UK and therefore the guidelines had been set to screen for it. In both sexes, the infection can result in urethritis, proctitis, blindness, trachoma and infertility, prostatitis, epididymitis, cervicitis, pelvic inflammatory disease (PID), ectopic pregnancy (EP), and acute or chronic pelvic pain. In neonate, it may lead to trachoma and pulmonary complications. However, it is now realised that other organisms, e.g. *Mycoplasmas hominis* (MH) and *Ureaplasma urealyticum* (UU) are just or more important, as they may elicit chorioamnionitis, preterm premature ruptured membranes, preterm labour and birth. These may also lead to pneumonia, bacteraemia, and meningitis in newborns. Therefore this study was carried out for 8 years (2005-2013) in a private clinic in collaboration with the CUHK to find out in Hong Kong 1) if CT is the most prevalent organism; 2) the relative prevalence of the various STD organisms and 3) the more sensitive method of collection of specimen is if semen or urine? For Group 1 who is having subfertility and group 2 with vaginal discharges the initial screening has been conducted to test the presence of CT & UU using Real Time PCR (Applied Biosystem 7500). If either one of the test is found to be positive, the couples are counseled to have the complete check-up package which includes testing the presence of DNA for CT, UU, MH, *Neisseria gonorrhoea* (NG); blood for VDRL for syphilis, Herpes I & II IgG. For Group 3 who are having pelvic pain and the infected patients were asked to have the complete check-up for STD. For the screening tests, there were more UU than CT, both in female (334/901=37.1% vs. 48/862=5.6%; $p<0.001$) and, male (40/289=13.8% vs. 10/177=5.7%; $p=0.006$). UU was detected more in female than male ($p<0.001$). For those who had complete STD check-up ($n=620$), UU, MH, CT, NG PCR were (+) in 35.5%, 13.7%, 7.1% & 0.8% respectively. Herpes I, II IgG & VRDL were (+) in 74.5%, 19% & 0.64%, respectively. In the subset of 127 couples, UU, MH, CT, NG PCR were (+) in 63.4%, 18.1%, 11% & 2.4% respectively; 24.4%, 12.6%, 3.2% & 0% respectively in husbands. Herpes I, II IgG & VRDL were (+) in 78.7%, 22.8% & 0.79% respectively in wives, 67.7%, 14.2% & 0.79% respectively in husbands. There was no significant difference in the incidence of STD detected in urine or semen specimens. In conclusion, 1. UU & MH were both more prevalent than CT in Hong Kong 2. Detection of NG & Syphilis was uncommon 3. Herpes I (& II) exposure was high, and 4. There did not appear any difference in the detection of STD with semen or urine samples.

Biography

Clement Leung-kwok Chan was sent on Hong Kong Government scholarship to University of London for pre-Royal College Membership training in 1980; Government scholarship to Monash University (Australia) as the 1st Infertility Research Fellow and Honorary Lecturer in 1984-86. All these years he has worked from Lecturer to Associate Professor in National University of Singapore from 1986 to 2000. In 1990, he won the scholarship for RCOG accredited training in High Risk Obstetrics at Bristol University (UK). Followed by which he was selected on Singapore MRC Fellowship to Cambridge University (UK) from 1998 to 1999. He was also appointed as the Chairman and Professor at University of Tasmania, Australia from 2001 to 2003. Since then he has retired to private medical practice in Hong Kong.

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