Global views

Chlamydia trachomatis infection in an urban setting

Demographic data

We undertook a study to find out the *Chlamydia trachomatis* infection rate among the subjects attending three different clinical set ups in Mumbai (Bombay), India, for treatment of complications associated with reproductive health. These clinical set ups were: (a) a private gynaecology clinic; (b) an outpatient gynaecology facility in a public hospital; and (c) an infertility clinic of the institute.

Among the 123 subjects enrolled in the study, 108 were women belonging to the age group 18–42 years (mean age 27.82 years) and 15 were men of infertile couples, whose spouses were tested positive for *C trachomatis*. These males were asymptomatic and in the age group 25–38 years (mean age 31.3 years). The subjects were grouped into the following five groups on the basis of their clinical presentation:

Group I (n=16): women with history of obstetric complications such as ectopic pregnancy, stillbirth, spontaneous/repeated abortion, or preterm delivery.

Group II (n=25): women with either vaginitis or cervicitis or both who were considered to have lower genital tract infections.

Group III (n=7): asymptomatic women with a history of primary infertility of more than 2 years' duration.

Group IV (n=60): women with complaints of abdominal pain, back pain, or irregular periods.

Group V (n=15): males of infected spouse.

These subjects were screened for *C trachomatis* infection for the first time with consent.

Methods

Samples like cervical swab specimens, seminal plasma, and first void morning urine sediments (only from males) were used for detection of *Chlamydia* antigen using the kit Chlamydiazyme (Abbott, USA).

Results

C trachomatis infection rate is different in different groups of the study population and is presented in table 1.

Comment

Scanty information is available on incidence and prevalence of laboratory confirmed *C trachomatis* of the genital tract in India. There is also a wide variation in the reported infection rate. In the present observation the infection rate varies between 14.3–20% among the women with reproductive health complications (groups I, II, and III). Some studies have shown higher rate of infection varying from 23.3–33%,[1–3] while others have revealed low rate of infection from 0.3–3.2%.[4 5] Among the group IV cases the infection rate is 1.7%, whereas the reported infection among the healthy control varied from 0.2% to 6.7 %.[1 3] Relatively little information is available on infection among the male population. Only 1.1% of the male subjects had chlamydia infection whose sexual partners had symptoms of vaginal discharge,[5] but a high infection rate (33.3%) observed here among the male partners (group V) whose spouses were infected revealed the need for partner screening. All this scattered information emphasises the need of a detailed study in a larger population in the region to highlight the true prevalence of this disease and to decide the plan of action.

Table 1 Chlamydia trachomatis infection in different groups of cases

Groups	*I*	*II*	*III*	*IV*	*V*
Cases	16	25	7	60	15
Chlamydia positive (%)	3 (18.8)	5 (20)	1 (14.3)	1 (1.7)	5 (33.3)

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Contributors: JM-P designed the study, carried out the experiment, analysed the result, and wrote the manuscript; PKM and JSG collected samples from selected cases; UMD helped in the smooth running of the project.

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