

## Interest of systematic screening for *Chlamydia trachomatis* in young women consulting for contraception

J. Orfila (1), J. Mention (2), J.M. Sueur (1)

(1) Biobank of Picardy, Amiens, France

(2) Center of Obstetrical Gynecology, Amiens, France

**Objectives:** Assess the efficacy of a systematic screening protocol for genital infections due to *Chlamydia trachomatis* in a population consulting for contraception under 30 years of age at an obstetrical gynecology center in Amiens, France. **Methods:** Diagnosis of a *Chlamydia trachomatis* infection is performed using both a molecular biology technique (AMP CT – Gen-Probe) on first voided urine samples, and a serology technique detecting IgG, IgA and IgM (Wang and Grayston Microimmunofluorescence). The study includes 1026 sexually active women and covers the period from June 1999 to January 2001.

**Results:** To date, 17 positive urine samples have been found, representing a prevalence of 1.66 % (17/1026). Serological results for 64 women were found to be specifically positive for *C. trachomatis*, representing a seroprevalence of 6.24% (64/1026). The 17 women with a positive urine result all had serum IgG.

Positivity distribution per age-group

Age- group	Percentage
16-20	4,1 %
21-25	4,1 %
26-30	1,8 %

A study of the immunoglobulin classes gives the following distribution:

IgG only	39
IgG + IgA	20
IgG + IgM	3
IgG + IgA + IgM	2
Total	64

Concomitant presence of IgG and IgA is therefore detected in 4.1 % of this population, enabling a diagnosis of persistent infection to be considered.

**Conclusion:** This study shows that 47 patients (64 specifically positive serological results minus 17 positive urine samples), without a known clinical or biological case history have already been in contact with *Chlamydia trachomatis* but do not eliminate *Chlamydia trachomatis* in urine. Our study shows that IgM provide no useful information for the diagnosis of positive patients and confirms the interest of systematic screening in this type of population using both amplified urine tests and IgG and IgA serological examinations.