

## LETTER TO THE EDITOR

# Incidence of Chlamydia infection among asymptomatic women presented for routine Papanicolaou smear: experience in South Western Victoria, Australia

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## Dear Editor

We would like to draw your readers' attention to the issue of asymptomatic sexually transmitted infection (STI) in women in rural communities. We can report the results of a small study looking at the feasibility of a rural practice-based preventative approach to this important problem.

*Chlamydia trachomatis* is a common STI<sup>1</sup>. If the condition is left untreated, it can lead to pelvic inflammatory disease, infertility, ectopic pregnancy, secondary STIs and other complications<sup>2</sup>. Chlamydia infection is often asymptomatic

until serious complications have developed<sup>2</sup>. A recent study by Ward, Rodger and Jackson has shown that opportunistic screening for this infection could potentially lead to significant healthcare cost savings<sup>3</sup>. *Chlamydia trachomatis* can be detected either by a urine test with ligase chain reaction (LCR) assays or polymerase chain reaction (PCR) assays from an endocervical swab. Treatment is usually simple and effective with azithromycin<sup>2</sup>.

We decided to investigate the prevalence of Chlamydia infection among young women in a Victorian coastal town, who presented to a small rural practice for Papanicolaou smear check. We chose PCR, using an endocervical swab, to



analyze for Chlamydia infection. Although urine sample analyzed by LCR has a high sensitivity and acceptable specificity, PCR shows less deterioration of the specimen with transportation delay – an important issue for rural clinicians.

Patients who presented to the clinic for a Papanicolaou smear check were invited to participate. Appropriate consultation was conducted and verbal consent obtained. Selection criteria included sexually active women aged 15-35 years, in a current sexual relationship of 12 months or less, presenting for Papanicolaou smear check. Patients excluded from this study were those with previous gynaecological conditions, not giving their consent for the test, and patients symptomatic of STIs.

In all, 67 patients fulfilled the study criteria and were included in our study. Nine were identified as having *Chlamydia trachomatis* infection, an incidence of 13%. The affected patients were aged between 19 and 25 years with a mean age of 20.5 years. This prevalence rate was similar to a previous study in the UK<sup>4</sup> which shared similar socio-economic and demographic status with our region.

The patients were counseled and treated appropriately. A repeat test one month later showed seven patients were clear of infection and two did not return for follow up.

Contact tracing and treatment of sexual partners was a difficult task. Only three patients were willing to comply. Of the three, two had only a vague idea of their previous sexual partners. The other six patients refused to comply and information was forwarded to the Health Department.

Our study, being based in a single rural practice, could only recruit a small number of patients. Nevertheless our findings should alert rural doctors to the high prevalence and importance of this STI, and to the practicability of

undertaking a practice-based screening approach to early detection and treatment.

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