Screening for chlamydia with the Pap test

The implementation of the recent National Health and Medical Research Council Guidelines for the management of asymptomatic women with screen detected abnormalities is welcome and should address the current practice of unnecessary repeated investigation of young women infected with human papilloma virus (HPV). It is timely to consider the overall benefit of the Pap test in this group for whom rates of cervical cancer are extremely low.

Although less likely than their older counterparts to develop cervical cancer, women of reproductive age are at significant risk of developing chlamydia infection. Chlamydia prevalence is rising in Australia (Figure 1) despite the provision of targeted screening guidelines. It is possible that broad based routine chlamydia screening could reduce the prevalence and subsequent complications of chlamydia such as ectopic pregnancy and infertility. One way of achieving broad based screening would be to link chlamydia screening to the routine Pap test. We conducted a pilot study of combined Pap/chlamydia screening in Australian Capital Territory general practice.

Methods

The study was approved by the Australian Capital Territory Health Human Research Ethics Committee and was conducted between October 2002 and October 2003.

Participating general practitioners were asked to invite women under the age of 40 years who presented for a Pap test to also undergo a chlamydia test. General practitioners collected a chlamydia swab at the same time as taking the Pap smear from consenting women. These were sent to participating laboratories to test for chlamydial DNA using PCR (Roche Cobas Amplicor® CT/NG assay). To estimate the number of minutes added to the consultation by introducing chlamydia testing, GPs completed a brief questionnaire. Verbal and written feedback was also sought concerning why GPs did not recruit women and perceived difficulties in combining the Pap and chlamydia tests.

Data were analysed using the SPSS™ release 11 and confidence intervals calculated using the Clopper-Pearson method in the StatXact5 package.

Results

Twenty-one GPs (20 women, 1 man) from 14 general practices recruited 364 women to the study with the number of women recruited by each GP ranging from one to 72 (median 14). Of the 364 women who underwent combined Pap/chlamydia screening, 11 were excluded from the analysis as they were over 40 years of age. Of the remaining 353 women aged 17–39 years (median 29 years), four tested positive for chlamydia (1.1%, 95% CI 0.3–2.9%). These four women were aged 19, 21, 22 and 39 years. Sixteen (76%) of the 21 GPs returned the written questionnaire. General practitioners estimated that adding chlamydia testing to the Pap test under the research protocol increased the length of consultation by 2–7 minutes (median 5 minutes). The most common reason cited for not recruiting women to the study was lack of time/running behind.

Discussion

Several studies have suggested that selective screening for chlamydia on the basis of symptomatology or reported behaviour misses significant numbers of infected individuals. The most commonly quoted selective screening criterion for chlamydia is age, with most authors suggesting that adolescents and young adults should be screened. However, in Australia in 2004, while 59% of infections occurred in the 15–24 years age group, a further 33% are notified in the 25–40 years age group. The trend toward deferral of pregnancy to the late 20s and 30s supports the argument for screening throughout a woman’s reproductive life. Clearly, a coordinated public health approach to the control of chlamydia would need to target a broader audience than just those who undergo Pap tests. Nevertheless, with 65% of women in the 20–40 years age group attending general practices for a Pap test in any given 2 year period, the Pap/chlamydia test offers an obvious way of reaching a substantial proportion of the sexually active population. Contact tracing where a positive result is found would substantially increase the impact of screening on the overall disease burden in the community.

Our study demonstrates that it may be possible for GPs to routinely offer chlamydia testing at the same time...
as the Pap test. We are undertaking an NHMRC funded randomised controlled trial of combined Pap/chlamydia screening in general practice to assess the effect of this approach on overall screening rates.

Implications for general practice

• Chlamydia may be asymptomatic in women.
• Women may not report well recognised risk factors such as new partner.
• Consider offering a chlamydia test to any woman of reproductive age who attends for routine Pap test.

Conflict of interest: none.

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References