HPV vaccine catch up schedule
An opportunity for chlamydia screening

The human papillomavirus (HPV) vaccine (Gardasil) catch up schedule in general practice provides a unique opportunity for sexual health screening in females not in school and up to 27 years of age. Chlamydia is a priority in this age group. This article presents a case for the value of opportunistic testing for chlamydia in patients presenting for Gardasil vaccination.

Why chlamydia?

The incidence of chlamydia is rising in Australia and has increased fourfold in the past 10 years (Figure 1). This increase may be partly due to the ease and availability of current chlamydia polymerase chain reaction (PCR) testing. Chlamydia is now the number one notifiable disease in Australia with an incidence of 47 030 infections in 2006. In a recent study of an Australian general practice population the rate of positive chlamydia tests was found to be 3.5–4.9% of females tested. Importantly, 80% of cases occur in those aged 15–30 years.

Early detection and intervention can prevent serious and long term consequences and reduce the risk of transmission to sexual partners. This is particularly important for those with asymptomatic disease, who can pass on the infection without even knowing they have it.

Screening and treatment has the potential to reduce the prevalence and subsequent complications of chlamydia. In women, complications include cervicitis, urethritis, or upper genital tract infection. These can result in pelvic inflammatory disease (PID), tubal infertility, ectopic pregnancy and chronic pelvic pain. Between 10–40% of chlamydial infections in women can lead to PID if left untreated and, of those with PID, up to 20% may become infertile.
Table 1. The Wilson-Jungner criteria for appraising the validity of a screening program

- The condition being screened for should be an important health problem
- The natural history of the condition should be well understood
- There should be a detectable early stage
- Treatment at an early stage should be of more benefit than at a later stage
- A suitable test should be devised for the early stage
- The test should be acceptable
- Intervals for repeating the test should be determined
- Adequate health service provision should be made for the extra clinical workload resulting from screening
- The risks, both physical and psychological, should be less than the benefits
- The costs should be balanced against the benefits


As 80% of females aged 15–24 years visit a general practitioner each year, GPs are well placed to offer testing to this target group – who may present for contraception, sexual health advice, or mental health issues. Routine linking of chlamydia testing with Pap screening has doubled the screening rates in women.

**Linking chlamydia screening to HPV vaccination**

Chlamydia meets the Wilson-Jungner criteria for screening (Table 1). However, research into the adequacy of opportunistic screening is required and payment options and practice nurse support need consideration. In the meantime, one way forward is to find strategies to increase the population being opportunistically screened.

The main barriers to opportunistic chlamydia testing have been identified as insufficient time during a standard consultation, forgetting to consider testing in the target group, and the difficulty of raising the concept of chlamydia testing during unrelated consultations. Linking chlamydia screening with HPV vaccination addresses these barriers and has the potential to increase chlamydia screening in the high risk age group.

**Urine chlamydia PCR**

Urine based screening has been proven to be an acceptable and sensitive method for detecting chlamydia in the general practice population. With current PCR detection, the 2 hour voiding interval before testing is no longer necessary, thus allowing for truly opportunistic ‘on the spot’ urine collection.

**The Tamworth example**

Clinicians within a regional general practice in Tamworth (New South Wales) offered urine chlamydia PCR testing at any of the three visits for HPV vaccination (Gardasil). Patients were asked to ring the surgery in 1 week for the result of their chlamydia urine test. Over 90% of patients accepted the option to screen. If they screened positive, they were targeted for treatment, counselling and contact tracing by their GP.

Clinicians found that linking chlamydia testing with Gardasil vaccination had high patient acceptability. They felt it was an effective use of practice and patient time, particularly as the intervention is brief and can be performed by the practice nurse. The current Medicare payment system for practice nurse immunisation allows some remuneration for this intervention. Most importantly, chlamydia screening was increased in the high risk age group.

**Summary of important points**

- The HPV vaccine (Gardasil) catch up schedule in general practice is available to females not in school and under the age of 27 years until June 2009.
- Chlamydia screening is a priority in this age group.
- Opportunistic chlamydia screening with urine chlamydia PCR at presentations for HPV (Gardasil) vaccination has the potential to increase chlamydia screening in the high risk age group.

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**References**