### Sexual health

# Towards a national chlamydia screening program for Australia

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The third in this series of articles on sexual health discusses issues that need to be addressed before a national screening program for chlamydia can be implemented.



Figure. Cervical smear showing infection with Chlamydia trachomatis. Infected epithelial cells (pink) contain chlamydia inclusion bodies, where the bacteria reproduce (spherical, light pink and small, dark pink areas).

#### The silent epidemic

In 2004, over 35,000 cases of genital chlamydial infection were notified in Australia, yet this probably represents only a fraction of the actual prevalence of infection in the population.<sup>1-3</sup> About 90% of genital infections from Chlamydia trachomatis do not result in symptoms, so most infected individuals – both men and women - have little cause to attend health services. Consequently, their chlamydia remains undiagnosed, leading to further transmission of infection and morbidity.1 Many women with pelvic inflammatory disease have few symptoms, and most

women with tubal infertility are unaware of any prior history of pelvic inflammatory disease. The clinical manifestations and complications arising from chlamydial infection are shown in Table 1.

That most chlamydial infections remain undetected should not come as any surprise. In 2004, less than 7% of Australian women aged 16 to 24 years (the age group at highest risk for chlamydia) were tested for chlamydia.4 Increased testing will detect a greater number of infections among these women and reduce the risk of complications.

#### Chlamydia screening

To have any impact on chlamydia, our aim must be to significantly increase testing rates. This would best be achieved through a national chlamydia screening program, similar to that operating in a number of other industrialised countries, including the USA, England and Canada.5 No such program currently exists in Australia; however, the Federal Government has committed funding towards the piloting of chlamydia screening projects over the next few years.

The wide availability of nucleic acid tests (such as polymerase chain reaction and strand displacement assay) has made testing for chlamydia easier and more acceptable to patients and practitioners.

With nucleic acid tests, men can be tested using first-void urine, rather than a painful urethral swab, and women can be tested using either first-void urine or a selfcollected vaginal swab, without the need for a speculum examination. In most cases, the treatment of uncomplicated

### Table 1. Chlamydial infection: clinical manifestations and complications

#### Women and men

- Asymptomatic infection
- Conjunctivitis
- **Proctitis**
- Reactive arthritis

- Cervicitis
- Urethritis
- Pelvic inflammatory disease
- Tubal infertility
- Chronic pelvic pain
- Ectopic pregnancy

#### Men

- Urethritis
- Epididymo-orchitis

#### Mother-to-child transmission

- Neonatal conjunctivitis
- Infant pneumonia

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continued

## Table 2. Recommendations for chlamydia testing

#### Screening recommendations

- Annual screening of all sexually active women aged 25 years and younger, even if there are no symptoms
- Annual screening of homosexually active men, including first-void urine and an anal swah

#### Clinical indications for testing

In sexually active individuals, chlamydial infection should be considered in the presence of the following:

#### Women and men

- Rectal pain and discharge with a history of receptive anal sex
- Sexual contact with a person with confirmed or suspected chlamydia
- Presence of another sexually transmitted infection
- Patient request

#### Women

- Vaginal discharge
- Dvsuria
- Intermenstrual or postcoital bleeding
- Cervicitis clinically apparent or an inflammatory Pap smear
- Lower abdominal pain
- Adnexal and/or cervical motion
  tenderness
- A woman seeking termination of pregnancy

#### Men

- Urethral discharge
- Urethral discomfort
- Dysuria
- Scrotal pain

chlamydial infection is straightforward, using a single 1.0 g dose of oral azithromycin (Zithromax).

#### Who to screen

Who should be screened for chlamydia? Overseas programs have recommended

that all sexually active women aged 25 years and under be opportunistically tested for chlamydia – that is, a chlamydia test is offered to a woman even if she is attending a service for other reasons. This policy has been endorsed by the Royal Australian College of General Practitioners.

In the absence of current national guidelines, our recommendations for chlamydia testing - screening of asymptomatic individuals as well as testing based on clinical parameters - are shown in Table 2. So far, most overseas programs have focused on screening women rather than men. Ostensibly, this is because most of the serious complications from chlamydia occur in women (Table 1).5,7 However, whether men should be included in any future national program needs to be debated. Currently, more women are tested for chlamydia than men.7 Most men are tested only when they present to doctors with urethral symptoms, which means that the majority of infected men remain undiagnosed.

While infection with chlamydia is prevalent throughout the general population, particular groups are at increased risk. Rates of chlamydia infection are substantially higher among Aboriginal people in remote areas, reflecting poor access to health services. Among homosexually active men, asymptomatic anal chlamydial infection is common. This is of particular concern as such infection probably increases the risk of HIV transmission between men. Anal infection can be detected by nucleic acid testing of a specimen obtained by inserting a swab 2 to 3 cm into the anal canal.

#### Conclusion

Australia is in an excellent position to implement a successful chlamydia screening program, and GPs can play a key role. Figures from the Health Insurance Commission indicate that over 80% of women and almost 70% of men aged 15 to 24 years see a GP at least once a year,

provid-ing opportunities for chlamydia testing among those who are sexually active.<sup>4</sup> Issues that still need to be addressed include precisely who should be screened and how GPs can best be supported in implementing such a program. Ultimately, if we get this right, Australia could set new international standards in chlamydia control, with substantial benefits for our young men and women. MI

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#### References

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**DECLARATION OF INTEREST: None.**