

AUSTRALASIAN CHAPTER OF SEXUAL HEALTH MEDICINE: TESTS, TREATMENTS AND PROCEDURES FOR HEALTHCARE PROVIDERS AND CONSUMERS TO QUESTION

The Australasian Chapter of Sexual Health Medicine (AChSHM) is a Chapter of the Royal Australasian College of Physicians (RACP) Adult Internal Medicine Division that connects and represents Sexual Health Medicine Fellows and trainees in Australia and New Zealand.

1. Do not order herpes serology tests unless there is a clear clinical indication.

Herpes serology is not an appropriate screening test in asymptomatic patients and does not accurately confirm whether the person is infected or is a transmission risk to others from asymptomatic shedding. Clinicians also need to consider whether test results will influence treatment or outcomes because, if they do not, then testing is a waste of finite health resources and is not indicated. Herpes serology tests only have good sensitivity and specificity in high prevalence populations. However, selective use of herpes serological tests may be justified for particular groups, such as those at high risk for STIs and human immunodeficiency virus (HIV) infection who are motivated to reduce their sexual risk behaviour; HIV-infected patients; patients with sexual partners with genital herpes; and in cases where a woman appears to have a first episode of herpes simplex virus (HSV) during pregnancy.

Supporting Evidence

- Guerry SL, Bauer HM, Klausner JD, Branagan B, Kerndt, PR. Recommendations for the selective use of herpes simplex virus type 2 serological tests. *Clinical Infectious Diseases* 2005; 40(1): 38-45.
- New Zealand Herpes Foundation. Guidelines for the Management of Genital Herpes in New Zealand. 10th Ed, 2013.
- Scoular A. Using the evidence base on genital herpes: optimising the use of diagnostic tests and information provision. *Sexually Transmitted Infections* 2002; 78(3): 160–165.
- Strick L, Wald A. Type specific testing for herpes simplex virus. *Expert Review of Molecular Diagnostics* 2004; 4: 443-53.

2. Do not screen for chlamydia using serological tests.

There is no role for chlamydia serology as a screening test as antibodies elicited during infection are long-lived, meaning a positive antibody test will not distinguish between a previous and a current infection and are non-specific for genital serovars. Chlamydia serology may be useful in specific circumstances, for example, investigating atypical pneumonia in babies or in identifying late stage Lymphogranuloma Venereum (LGV) infection.

Laboratory tests based on nucleic acid amplification (NAAT) technologies remain the first choice for diagnosis of chlamydial infections during pregnancy and in other settings. NAAT testing for identifying LGV serovars of Chlamydia trachomatis has superseded the use of serology for diagnosis but is only available in some specialist settings.

Supporting Evidence

- Chernesky MA. The laboratory diagnosis of Chlamydia trachomatis infections. *The Canadian Journal of Infectious Diseases & Medical Microbiology* 2005; 16(1): 39–44.
- Papp JR, Schachter J, Gaydos CA, Van Der Pol B. Recommendations for the Laboratory-Based Detection of Chlamydia trachomatis and Neisseria gonorrhoeae — 2014. *Morbidity and Mortality Weekly Report (MMWR)* 2014; 63(RR02): 1-19.

3. Do not treat recurrent or persistent symptoms of vulvovaginal candidiasis with topical and oral anti-fungal agents without further clinical and microbiological assessment.

While topical and oral anti-fungal agents are the recommended treatment for candidiasis, an adequate clinical and microbiological assessment should be undertaken before they are prescribed or self-administered by patients for recurrent or persistent symptoms of vulvovaginal candidiasis. It is important to rule out other causes of vulvovaginal symptoms such as bacterial vaginosis or genital herpes first so that the other infections are not left untreated. Moreover, inappropriate use of antifungal drugs can lead to increased fungal resistance, especially in non-albicans species of candida.

Supporting Evidence

- Davies S, Johnson E, White D. How to treat persistent vaginal yeast infection due to species other than *Candida albicans*. *Sexually Transmitted Infections* 2013; 89: 165–166.
- Dun E. Antifungal resistance in yeast vaginitis. *Yale Journal of Biology & Medicine* 1999; 72(4): 281–285.
- Sobel JD. Vulvovaginal candidosis. *Lancet* 2007; 369: 1961–71.

4. Do not test for ureaplasma species in asymptomatic patients.

Ureaplasma species are part of the normal genital microbiota and there are typically high rates of colonisation of the organism in sexually active adults. Testing or screening for genital infection with ureaplasma species is not recommended outside specialist or research settings as they have not been established as a cause of lower genital tract disease.

Supporting evidence

- Patel MA, Nyirjesy P. Role of Mycoplasma and ureaplasma species in female lower genital tract infections. *Current Infectious Disease Reports* 2010; 12(6): 417-22.

5. Reconsider the use of nucleic acid amplification testing for gonorrhoea in low-prevalence (i.e. <1% prevalence) populations and people who do not belong to a higher risk group.

The introduction of a duplex testing item into the MBS for nucleic acid amplification testing (NAAT) of chlamydia and gonorrhoea has resulted in laboratories performing this duplex test even if a test for only one organism was requested. Use of NAATs as a screening test for gonorrhoea in low-prevalence populations is not advised due to their low positive predictive value. However, an adequate sexual history needs to be taken in all cases to allow for the identification of higher risk groups within the population including men who have sex with men (MSM), the Aboriginal and Torres Strait Islander population, heterosexuals who travel overseas and people with multiple sexual partners. There are potential harms associated with false positive test results and incorrect diagnosis of gonococcal infections. Therefore it is recommended that use of NAAT for gonorrhoea should be reconsidered in low prevalence (i.e. <1% prevalence) populations.

Supporting evidence

- Donovan B, Dimech W, Ali H, Guy R, Hellard M. Increased testing for *Neisseria gonorrhoeae* with duplex nucleic acid amplification tests in Australia: implications for surveillance. *Sexual Health* 2015; Epub ahead of print. doi: 10.1071/SH14179.
- Fifer H, Ison CA. Nucleic acid amplification tests for the diagnosis of *Neisseria gonorrhoeae* in low-prevalence settings: a review of the evidence. *Sexually Transmitted Infections* 2014; Epub ahead of print. doi: sextrans-2014-051588.

How was this list created?

With the assistance of the Royal Australasian College of Physicians, the Australasian Chapter of Sexual Health Medicine (AChSHM) Council produced and distributed to its membership an online survey. The survey listed 5 examples of clinical practices in sexual health medicine which may be overused, inappropriate or of limited effectiveness in a given clinical context.

Members were asked to comment on these examples and to suggest other low-value practices which may be a sizeable issue in the specialty. Based on the feedback, 8 items were identified for further investigation by AChSHM Council through an evidence review. This resulted in the final list of 5 recommendations which were endorsed by the Council on December 15, 2015.