

What's new in cervical screening?

Revamped NCSP includes self-collection, HPV tests and a traffic-light system for risk



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THE renewed National Cervical Screening Program (NCSP) introduced in December last year is expected to lower the incidence of cervical cancer and mortality by at least 30% in Australia.

The new cervical screening test (CST), which has replaced the Pap smear, is backed by strong evidence showing its superior effectiveness in predicting cervical cancer risk.

The renewed program includes other changes such as a self-collection option for under-screened or never-screened women, a later age to start and finish screening for asymptomatic women, and guidance for the investigation of abnormal vaginal bleeding.

BACKGROUND

The NCSP has a long history of success – Australia's annual incidence and mortality rates for cervical cancer are among the lowest in the world.

In 2012, new cases of cervical cancer in Australia/New Zealand were six per 100,000, compared with 43 per 100,000 in East Africa, where mortality rates are up to 18-fold higher.

But despite Australia's low rates, about 930 women will be diagnosed with cervical cancer this year, and 258 will die from it. About 80% of these women will be from the under-screened or never-screened cohort.

In 1984, German virologist Professor Harald zur Hausen discovered that cervical cancer was due to persisting infection of the cervix with human papillomavirus (HPV). Since then, the discovery of oncogenic types of HPV and the development of a vaccine led to the 2007 introduction of the



HPV vaccination program in Australia, and a subsequent switch to using an HPV DNA test in the screening program.

Recent pilot study results from the Compass Trial, Australia's largest clinical trial comparing the Pap smear with the HPV test to see which is best at preventing cervical cancer, indicate that the HPV test is far more effective at picking up high-grade abnormalities than the Pap test.

THE HPV TEST

The former NCSP was based on two-yearly Pap smears. The renewed program is based on five-yearly cervical screening using a primary HPV test with partial genotyping, and reflex liquid-based cytology (LBC) triage for asymptomatic women aged 25-74 years.

The CST is performed in exactly the same way as a Pap smear. The primary HPV test looks for 14 oncogenic HPV types,



including types 16 and 18 that are responsible for about 77% of cervical cancers in Australia.

If any oncogenic HPV is detected, the laboratory will automatically arrange for reflex cytology testing on the same sample. Women with HPV 16 or 18 detected will be referred directly for colposcopic assessment, irrespective of the reflex LBC test result, because this result will inform the

colposcopist. In women with other oncogenic HPV types, the reflex LBC result determines the next steps in management, such as referral for colposcopy or a follow-up HPV test in 12 months, as recommended on the laboratory report.

RISK-BASED APPROACH

The renewed program uses a so-called traffic-light system to determine a woman's risk of developing cervical pre-cancer or cancer. This is determined by her CST result, previous cervical screening history and the clinical notes on the pathology request form.

The traffic light system comprises:

- Low risk (green) – a woman will be invited to rescreen in five years as long as she is asymptomatic and has no evidence of HPV in the sample.
- Intermediate risk (orange) – a woman has tested positive for one of the oncogenic HPV types, but not for HPV 16 and 18, and her reflex LBC is negative or possible LSIL or LSIL abnormal cervical cells. She will be invited to have a follow-up test in a year's time to see if the HPV infection has cleared.
- High risk (red) – a woman tests positive for either or both HPV 16 and 18. Reflex LBC will be performed. A combined report will be issued, with a recommendation to be referred for a colposcopic evaluation.

SELF-COLLECTION

Self-sampling of vaginal cells is a new way in which GPs can extend the benefits of screening to never-screened or rarely screened women. This group includes Aboriginal and Torres Strait Islander women, those from culturally and linguistically diverse backgrounds, women in rural and remote regions, obese women, those experiencing domestic violence, and women who may be socially and economically disadvantaged.

GPs should be aware that self-collection is a pathway for women older than 30 who decline a speculum examination and are at least two years overdue for screening (that is, four or more years since their last Pap test). It must be done under the supervision of a health practitioner, and is not a take-home test or mailed-out kit.

With self-collection, eligible women can take their own vaginal sample for HPV testing. Although the sample contains vaginal and not cervical cells, it is sufficiently

Practice Points

- The renewed National Cervical Screening Program is expected to lower cervical cancer incidence and mortality by at least 30% because of the superiority of the new cervical screening test over the Pap smear.
- The screening program is now based on five-yearly cervical screening using a primary HPV test with partial genotyping, and reflex liquid-based cytology triage for asymptomatic women aged 25-74 years.
- The program uses a traffic-light system to determine a woman's risk of developing cervical pre-cancer/cancer, as determined by her screening result, previous screening history and the clinical notes on the pathology request form.
- There is also guidance for the investigation of abnormal vaginal bleeding.
- Self-collection supervised by a GP provides an opportunity for never-screened or rarely screened women to participate in the program.

accurate, approaching the sensitivity of a practitioner-collected cervical sample. As the sample does not contain cervical cells reflex LBC cannot be performed if oncogenic HPV is detected, so the laboratory report will include a recommendation for the woman to return to the practitioner to collect a cervical sample for reflex LBC.

At the consultation, practitioners can explain in a sensitive and culturally appropriate manner how the test is done, document the woman's preferred contact details and discuss follow-up.

If negative, the next screening will be in five years and women can be reassured they are at very low risk of cervical cancer.

If HPV 16 and/or 18 is detected on the vaginal sample, the patient should be referred for colposcopy, preferably within eight weeks. Women with other oncogenic HPV (not 16/18) should return to their practitioner for follow-up. At this time, a cervical sample will need to be taken and the LBC result will determine management.

For more Jean Hailes information on the renewed cervical screening program, see: bit.ly/2IfYtA2

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