

Gynaecological Oncology News

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HPV testing will replace PAP smear by 2016

A recommendation will be made to the Australian government to phase out the current two-yearly PAP smear cervical screening and replace it with HPV (Human Papilloma Virus) testing every 5 years by 2016*.

The new cervical cancer screening test will no longer focus on the detection of pre-cancerous or cancerous cells from the cervix. Instead, the test will pick up the presence of HPV, which is causally linked to the development of cervical cancer.

It is well known for more than 10 years that HPV test is more sensitive but less specific than the conventional PAP smear. The reason for the current seismic shift includes recent evidence that the HPV test is cost effective compared to the old PAP smear. It is estimated that the new HPV triage system will reduce cervical cancer mortality by 8% to 18% and save \$33M to \$52M in health care costs.

HPV causes cervical cancer or dysplasia but most HPV infections are self-limiting. The vast majority of women who get infected will not even notice. A large number of HPV strains are known but only a few are known to cause cell changes on the female genital system, including the cervix. They are known as high-risk HPV types and include HPV16, 18 and 45. A large majority of sexually active women under the age of 30 years will test positive for HPV (extremely high prevalence).

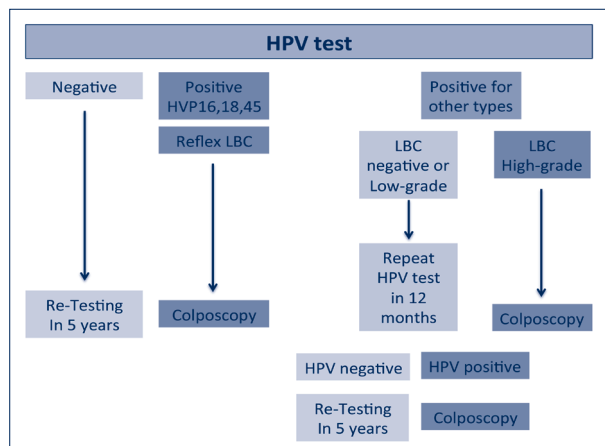
The proposed change will involve that women 25 to 69 years of age will still have a test, but the specimen will not be collected on a glass slide. Instead it will be collected in a liquid-filled container. The pathology institute will analyse the sample for HPV status first and will only proceed to analysing cytology [Liquid Based Cytology (LBC)] if the HPV sample indicates the presence of HPV (reflex LBC testing). If the cytology sample is also positive, patients will require a colposcopy.

The reasoning is that if a woman is HPV negative, we can reassure her that the chance is higher than 99% that she will not develop cervical cancer in the next 5 years.

In addition, most randomised trials yielded a higher rate of detection of high-grade changes compared to the conventional PAP smear slide. In a large trial, the incidence of invasive cervical cancer was less than half in the HPV testing group, compared to the PAP smear group after 2.5 years of follow up.

Another study found that HPV test also captures glandular abnormalities that make one fourth of all cervical cancer cases. In the past, we had to assume that the PAP smear effectively fails to diagnose cervical adenocarcinomas.

This is the proposed cervical cancer screening algorithm



*Source: MSAC Outcomes. Application No. 1276. Renewal of the National Cervical Cancer Screening Program

Implications of those changes

1. Women, who test HPV negative, will have extended screening intervals of 5 years (until now it was 2 years).
2. Four to five times more women than currently will require a colposcopy because HPV testing is far more sensitive (but less specific) than cytology testing. Women under the age of 35 years will be most affected.
3. Women under the age of 25 years will not be offered cervical cancer screening. If those women present with abnormal bleeding, (e.g. PCB) a cervical cytology and/or HPV test is standard care and will be government funded.

Some facts

1. Approximately two thirds of Australian women will have regular cervical cancer screening.
2. In the past, cervical cancer screening was effective to diagnose squamous cell changes early. Unfortunately, screening failed to diagnose glandular changes that constitute 25% of all cervical cancers.
3. Cervical cancer incidence is low in Australia compared to developing countries. However, in indigenous women the cervical cancer incidence is 3.5 times higher and mortality is 5 times higher than in Caucasian women.
4. The majority of women diagnosed with cervical cancer are not promiscuous but suffer from a HPV infection. Virtually all sexually active young Australians are HPV positive.
5. While cervical cancer is a massive problem in developing countries, it is also a very serious problem in Australia.
 - a. In 2009, 770 women were diagnosed with cervical cancer.
 - b. In 2010, 232 women died from cervical cancer
 - c. The number of Australian women who survived but suffer from the long-term consequences of cervical cancer treatment is unknown.

The 2nd Symposium of the Qld Centre for Gynaecological Cancer

will be held on **Saturday, 16 August 2014**
at the Education Centre at **RBWH in Herston**,
Brisbane.

Guest speakers include:

Prof Michael Quinn, Melbourne and Dr Marina Reeves,
UQ, Brisbane.

Please do not hesitate to give me a call if you wish to discuss an aspect of the above or a specific patient with me.
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