Study 'strongly supports' extending cervical screening intervals

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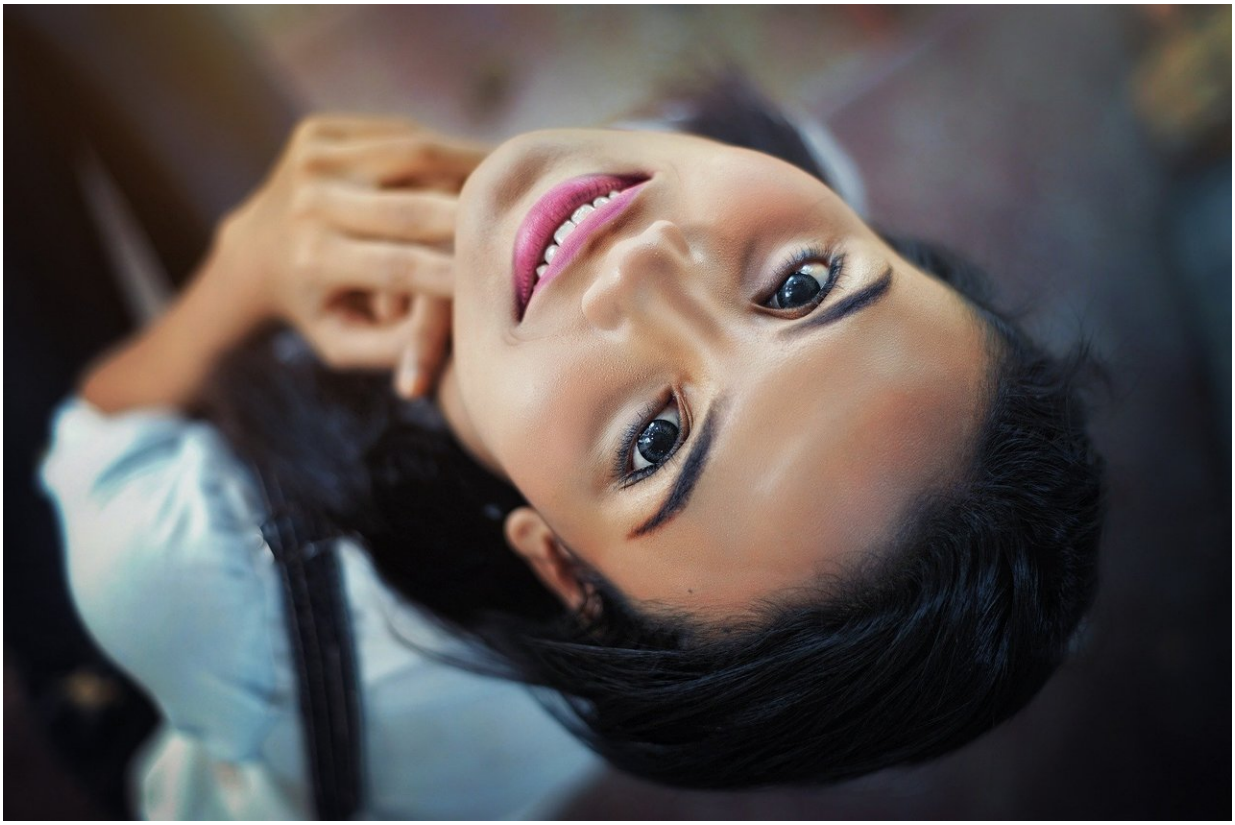

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Screening for high risk human papillomavirus (HR-HPV) infection works well in practice and is more sensitive than cytology (smear) testing—offering greater protection against cervical cancer, confirm

researchers in *The BMJ* today.

Their findings therefore support a switch to HPV screening across England and provide reassurance that screening intervals could be safely extended to at least five years, without increasing the risk of potentially life-threatening disease.

At present, 2,500 cases of cervical cancer are diagnosed each year in England, with a quarter diagnosed after a 'normal' smear test result.

Clinical trials show that HR-HPV screening leads to earlier detection of cervical lesions (known as cervical intraepithelial neoplasia or CIN) than liquid-based cytology or LBC ("smear") testing.

As such, NHS England and Public Health England are working towards a national roll-out of HPV screening by the end of 2019.

To ensure these trial results would work in the 'real world' a large pilot study of routine HPV and LBC testing was carried out in six NHS laboratories across England.

A team of UK researchers analysed results from this pilot, which included 578,547 women aged 24-64 years undergoing routine cervical screening (32% HR-HPV; 68% LBC) between May 2013 and December 2014, who were followed up until May 2017.

Women were immediately referred for further testing (colposcopy) if their HR-HPV test was positive and cervical lesions were found.

HR-HPV positive women with no cervical lesions were asked to return in 12 months for another test (early recall), and if HR-HPV persisted without abnormal cells, were recalled again at 24 months. Reassuringly, 80% of women attended these early recall appointments.

After taking account of factors that might have affected the results, the researchers compared levels of cervical lesions (CIN) picked up by the two screening tests.

CIN is divided into grades: CIN1, 2+ or 3+. The higher the number, the more of the cervix is affected.

They found that HR-HPV screening detected substantially more CIN than LBC testing (50% more CIN2+, 40% more CIN3+ and 30% more cervical cancer).

What's more, a quarter of the CIN2+ was detected after early recall in women with no cervical lesions.

The increased sensitivity of HR-HPV screening is also reflected in the remarkably low detection of CIN2+ amongst HR-HPV negative women when rescreened at three years, compared with LBC negative women, they add.

This is an observational study, and the researchers can't rule out the possibility that some of their findings may be due to other unmeasured (confounding) factors.

Nevertheless, they say this large pilot carried out under routine screening conditions has confirmed that HR-HPV screening is practical on a large scale—and confers greater sensitivity for both CIN3+ and cervical cancer than LBC testing.

In addition, this increased detection in prevalence (existing cases) was followed by a marked reduction in incidence (new cases) after three years, "lending strong support to an extension of the screening intervals," they conclude.

More information: Primary cervical screening with high risk human papillomavirus testing: observational study, *The BMJ*, DOI: 10.1136/bmj.l240 , www.bmj.com/content/364/bmj.l240

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