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E-Newsletter

ISCCP

Newsletter of Indian Society of Colposcopy & Cervical Pathology (Reg.)

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Editor's Message

Dear Friends,

Do you know these startling facts "We have the highest number of cervical cancer cases in the Asia Oceanic Region, China has a lower cervical cancer rate than India despite it's population" When China can do it, India with a large factory of doctors definitely can-it's just a question of your will!

Friends, you are the committed few who have become members of this society; you are the leaders for your friends & society. Please spread the message-whatever the method you have available screen each & every patient you see. It is the mindset of us gynaecologist which needs to change.

"Ask not what your country can do for you —
ask what you can do for your country."
- John F. Kennedy

Please motivate your friends to become members; we need to activate our movement against cervical cancer.

Saritha Shamsunder
Editor

Contents

Forthcoming Events

8th Annual Conference of ISCCP

at
Mumbai

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Life-Membership & Annual Membership Open

log on to
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Clinical Utility of Concurrent HPV DNA Testing with Liquid Based Cytology

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Since the time human papilloma virus (HPV) was implicated in cervical carcinogenesis in 1972, HPV has come a long way. Today, we know almost all cervical cancer is attributable to primary HPV infection. The HPVs that affect humans fall in to two distinctly classified types viz, low risk types that cause superficial genital skin lesions or warts (EGWs) and the high risk types that cause most malignancies to the lower genital tract. HPV infection or its precursor disease is largely asymptomatic and exhibits a non-inflammatory immune response, dysplasia occurs many years later.

Infection with HPV does not follow a classical humoral immune response; serology is not suitable for distinguishing present and past infections. Typically, HPV infection exhibits a T-cell mediated cytotoxic immune response till the pre-invasive stage, an accurate diagnosis of HPV infection therefore relies on mainly the detection of viral nucleic acid from the specimens collected from the affected tissue[1].

Clinical Guidelines

The American College of Obstetricians and Gynaecologists (ACOG) 2009 Guidelines[2]; the American Cancer Society (ASC), the American Society for Colposcopy & Cervical Pathology (ASCCP) and the American Society for Cervical Pathology (ASCP) 2012 Guidelines[3] have adopted HPV co-testing with conventional cytology as a screening method with expanded time intervals of 3 to 5 years for women >30 years. HPV testing provides enhanced sensitivity of more than 96% but poor specificity, which is fulfilled by the cytology testing.

How Common is HPV in India?

Indian population based studies have demonstrated positive prevalence of HPV at 6.6% among cytology negative women[4] and is estimated at 11% for unscreened women. However, the rate is higher at 17.5% among hospital outpatients with lower abdominal or pelvic complaints in the similar age group (Fig. 1). It is now well understood that many of these women tend to shed virus over 10 to 12 months post-infection and return to normal without ever exhibiting clinical manifestations. Only a small percentage of these women who remain persistently positive with HPV infection are likely to progress to cancer. The specificity for HPV testing is increased in women >30 years as these women are more likely to be detected with precursor lesions if tested positive for HPV, Most studies show HR-HPV positivity is seen in approximately 70% of CIN1, 80% of CIN2 and 96% of CIN3 lesions[5].

Fig. 1: HPV prevalence among symptomatic women

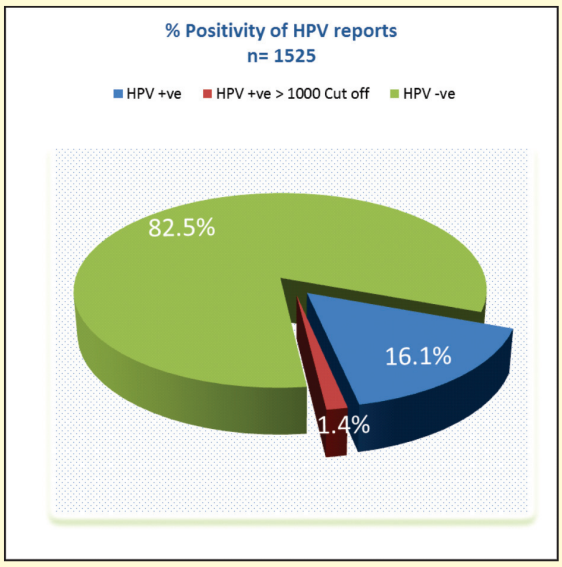
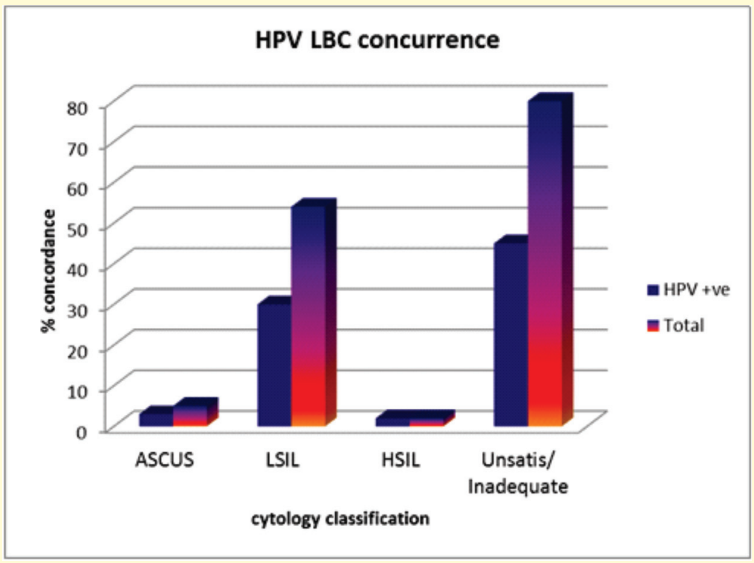


Fig. 2: Concurrence of HPV and LBC abnormal reports



Our study with symptomatic women concord well with 60% HR HPV positivity rate in ASCUS, 60% in LSIL and 100% in HSIL groups (Fig. 2). The sample for Liquid Based Cytology should be taken with the broom-like device rotated 3 to 5 turns in a clock-wise direction and to immediately rinse the device in the LBC solution with vigorous action to release all of the collected material. At times, it may be important to rub the bristles vigorously against the inside of the vial if the sample has observable mucus content. Not doing so or leaving the brush in the vial as such renders the cells sticking to the bristles permanently ever and making cells unavailable for thin-layer cast on the slides. After a thorough rinse, the brush must be discarded and not left in the vial. Lubricant or douching should be avoided and the cervix should be wiped with gauze before sample collection.

HPV and Disease Management

Today, the clinical indications for HPV testing have expanded conclusively in the cervical screening programs. The test has undoubtedly high sensitivity however has poor specificity[6,7]. While most HPV testing by digene hc2 gives us true positive results at the higher cut off levels, false positivity at low cut off may be attributable to the cross reactivity due to untargeted HPV DNA.

HPV Genotyping: Genotyping for specific HPV types may therefore be the most contemporary molecular approach to stratify which of the HPV positive women with or without abnormal cytology may require immediate intervention to those who could be followed over a period of 12 to 24 months. HPV types 16, 18, 45 & 31 are responsible for nearly 80% SCC and 90% of ad ca worldwide. Some studies also have found greater association of HPV 18 with and together with HPV 16 constitute to about 82% of cervical cancer[8,9].

The most critical factor for HPV-led cervical oncogenesis is to ascertain persistent infection and therefore one needs at least two consecutive tests along genotype. This helps to distinguish past infections from new infections since the baseline HPV test was positive, for the possibility of a new infection with another high risk type during the follow up period.

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ISCCP Activities

CME on Current Concepts in Cervical Cancer Prevention on 30th June, 2012 at Safdarjung Hospital, New Delhi

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