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Dear Friends.

Wish you all an exciting and healthier 2012! Let us all take a pledge this year to spend just an extra minute for every woman to screen for cervical cancer and educate her regarding vaccination for her daughters; this way we can prevent two cervical cancers per day! Dear friends, we have to take the lead as we may the only doctor in the woman's life-time!

In our crusade against cervical cancer we have joined hands with other organizations; an annual colposcopy course cum workshop with the RCOG-Northern Zone had 75 delegates from all over India participating; a Hands-On module at the AOGIN-India meeting at Mumbai was much appreciated by Prof Singer, the veteran of Colposcopy! Dr Raksha Arora at Maulana Azad Medical College continued to stimulate interest in young trainees and medical students by the live workshop held at the campus.

We are moving on to an electronic version which is going to non-members as well. Please encourage your friends & collegues to join in as members to champion this crusade. We welcome your articles and reports for subsequent issues.

Saritha Shamsunder Editor

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Forthcoming Events

7th Annual Conference of ISCCP

at
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New Dimensions in Cervical Cancer Screening

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Cervical cancer is preventable and treatable, however worldwide around 500,000 women suffer from the disease every year, and more than half of them die. Eighty percent of these deaths occur in developing countries (including India), where cervical cancer is still the leading cause of cancer-related death among women, with 134,420 new cases and 72,825 deaths each year (1).

Cervical cancer has a long pre-cancerous state that can be detected by screening methods and treated easily. With the introduction of prophylactic vaccines against oncogenic HPV viruses 16 & 18, it is estimated that about 70% cervical cancer can be prevented if administered before exposure to infection. In fact, in India it is estimated that the HPV 16/18 fraction is far more than other subtypes ie, about 82.5%(2). Thus there is now scope for both primary and secondary prevention.

Detection of precancerous lesions by regular Pap smears has been the most successful method of cervical cancer prevention in developed countries. Annual Pap smears starting three years after sexual debut can prevent 95% of cervical cancers, and 3-yearly Pap smears can prevent 93.5%. However, problems with cytology in developing countries include lack of infrastructure, trained cytologists and cytotechnicians and the need of repeated testing to overcome the poor sensitivity of cytology. Thus visual inspection after application of acetic acid (VIA) and Lugol's Iodine (VILI) have been considered appropriate in low-resource settings. These tests are inexpensive, easily taught to health workers, and report is instantly available. However, the disadvantages include a high false positive rate increasing the need for referral, poor reproducibility and inappropriateness for postmenopausal women.

The introduction of HPV testing for cervical screening has made a paradigm shift in cervical screening (3). The test is more sensitive(less false positive) and specific(less false negatives). It can be used for primary cervical screening, as a triage of ASCUS or follow-up after treatment of CIN2+lesions. The advantages of HPV testing include better sensitivity, automated result and the possibility of self-sampling. Disadvantages are higher cost and low specificity among women less than 30 years. The most widely investigated test used in many large studies to establish clinical sensitivity of HPV testing has been Qiagen's Hybrid Capture 2 (HC2)

test, which tests for 13 high risk HPV types. This test is used as screening method in developed countries and urban areas of developing countries (4).

Co-testing with the HPV test and cytology significantly reduces the limitations of cytology alone. Women with concurrent negative test results (Pap and HPV test) can be reassured that their risk of unidentified CIN 2, CIN 3 or cervical cancer is approximately 1/1000(5). The main aim of introducing new screening methods is to identify as many CIN2+ women as possible and limit the number of patients being referred to colposcopy. In a meta-analysis to compare the efficacy of HPV-DNA and cytology, sensitivity to detect CIN2+and CIN3+ was 96% and 53-55% respectively (6). Since adding cytology only marginally increases the efficacy of HPV testing, sequential testing is possible, i.e., HPV testing can be used as primary screening and HPV-positive patients referred for cytology triage. If HPV positive and cytology negative, they can be followed-up with repeat HPV testing after I year and if repeat testing (HPV & cytology) is negative, no screening is required for the next 3-5 years. However, women found to have abnormalities on cytology should be referred to colposcopy. HPV genotyping can be reserved for those women found positive on HC2, where cytology is normal or borderline, and if found positive for HPV 16/18, can be considered for immediate colposcopy instead of waiting for one year (3).

In a large study from India to compare cervical screening methods(cytology, HPV testing by HC2, VIA and control), the relative risk of cervical cancer and associated mortality was least in the HPV testing group(7). Overall age standardized incidence rate(per 100,000women) of cervical cancer was 3.7 in HPV group, 15.5 in cytology group and 16 in VIA group. In low resource areas, it is not possible to implement HC2, so Qiagen has developed a new simplified version of the test – the careHPV test. Health workers can run this test with minimal lab training in any setting and results are available in 2.5 hours. Self-sampling is also possible by patients as going to hospital for testing is also a constraint in rural areas. In a large study from rural India, it was concluded that a single round of HPV testing significantly reduced the incidence of advanced cervical cancer and mortality (4). Results from a clinical study conducted primarily in rural areas of China; the trial demonstrated that the careHPV Test had a 90% clinical sensitivity for identifying moderate or severe cervical disease (CIN 2+) — a higher sensitivity than

either VIA or liquid-based Paptesting (8); their clinical sensitivities of 41% and 85%, respectively.

In areas where HPV testing is not feasible, VIA can be used as primary screening method that provides measurable reduction in cervical pre-cancer lesions, cancer and related mortality(9). The AOGIN Guidelines have been laid out keeping in mind the differing requirements and facilities available in different regions (10).

To conclude, cervical cancer is still a major burden in our country. Introduction of prophylactic vaccine is expected to reduce the incidence of cervical cancer burden. However, the emphasis on screening is required for immediate results as well as in vaccinated population. As compared to need of repeated cytology testing, single round of *CareHPV* testing is likely to be a more effective, feasible, patient-friendly test. Awareness among women is an integral and essential part of cervical screening programmes to increase the uptake and bring about health-seeking behaviours and healthy lifestyle.

Bibliography

 Ferlay J, Shin HR, Bray F, Forman D, Mathers C and Parkin DM.GLOBOCAN 2008, Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 10 [Internet]. Lyon, France: International Agency for Research on Cancer; 2010. Available from: http://globocan.iarc.fr. Accessed on 10.11.2011.

- WHO/ICO HPV Information Centre Institut Catalàd'Oncologia Avda. www.who.int/hpvcentre.accessed on 19.11.2011
- Bhatla N, Singla S, Awasthi D. HPV DNA testing in developed countries. In: Best Practice & Research Clinical Obstetrics & Gynaecology (eds. Arulkumaran S, Denny L), Elsevier, 2012;26.2: In print.
- Cuzick J, Arbyn M, Sankaranarayanan R, Tsu V, Ronco G, Mayrand MH et al. Overview of human papillomavirusbased and other novel options for cervical cancer screening in developed and developing countries. Vaccine. 2008;26S:K29-K41.
- Naucler P, Ryd W, Törnberg S, et al. Efficacy of HPV DNA testing with cytology triage and/or repeat HPV DNA testing in primary cervical cancer screening. J Natl Cancer Inst 2009; 101 (2):88-99
- Cuzick J, Clavel C, Petry KU, et al. Overview of the European and NorthAmerican studies on HPV testing in primary cervical cancer screening. Int J Cancer. 2006 Sep 1;119(5):1095-101.
- Sankaranarayanan R, Nene BM, Shastri SS, et al.H PVscreeningforcervical cancerinruralIndia.N Engl J Med. 2009;360(14):1385-9.
- Qiao YL et al.A new HPV-DNA test for cervical-cancer screening in developing regions: a cross-sectional study of clinical accuracy in rural China. Lancet Oncol.2008; 10:929.
- Denny L, Kuhn L, De Souza M, et al. Screen-and-treat approaches for cervical cancer prevention in lowresource settings: a randomized controlled trial. JAMA. 2005;294(17):2173–81.
- Ngan HYS, Garland SG, Bhatla N, et al. Asia Oceania Guidelines for the Implementation of Programs for Cervical Cancer Prevention and Control. J Cancer Epidemiology.2011;,doi:10.1155/2011/794861.

ISCCP Activities







Post-Conference IFCPC Approved Annual Hands-On Colposcopy Course Cum Workshop on 5th-6th September, 2011 at Sant Parmanand Hospital, New Delhi



Hands-On Colposcopy Workshop (under aegis of ISCCP & RCOG North Zone India) on 5th November, 2011 at Tata Memorial Hospital, Mumbai



Colposcopy Workshop at Maulana Azad Medical College, New Delhi, 20th November, 2011





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