

e-Newsletter

IJULF

Member International Federation of Cervical Pathology and Colposopy

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

## www.isccp.in

#### From the Editor's Pen

Dear ISCCP members

Greetings from ISCCP and Happy Navratri to all,

There is always a concern regarding best cervical cancer screening methods despite guidelines. I am attaching a table below for all the members to appreciate the strategies adopted in the developed countries to prevent cervical carcinoma and its precursor lesions. This table has been adopted from the article published in an international pubmed indexed journal "Current problems in Cancer" in the August 2018 issue. According to this wherever primary HPV screening is used, best triage method to evaluate Hr HPV positive women is cytology and it is an ideal triage tool. Moreover, the high specificity of cytology offers a balance to the sensitivity of HPV testing.

Besides this, we will also be discussing the cancer screening strategies in low resource settings along with few colposcopic images shared by Dr Renuka. I again request all the ISCCP members to contribute in the Newsletter in the form of review article/ original articles/view point/case reports/images.

ISCCP members are continuously involved in the educational and public awareness activities in the field of cervical cancer prevention. Details of the activities held in last 3 months have been included in this issue along with 'Journal Scan' and 'News from around the world' sections.

Country	Primary screen	Triage plan for +hrHPV	Alternate follow up
Australia/	HPV testing	HPV genotyping/cytology	HPV testing repeated in 1 yr
New Zealand		neg HPV > rescreen in 5 yrs	neg HPV > rescreen in 5 yrs
		pos HPV 16/18 > colposcopy	
		other HPV > LBC, if HSIL > colposcopy	
		Oth hrHPV > LBC, if = LSIL rescreen 1 yr	persistent other hrHPV after 1 yr > colposcopy
Canada	Pap testing	Per 2013 guidelines from CTFPHC	Pilot studies vary by region
	With regional variation and roll- out of primary HPV screening in pilot studies	Some pilot studies using cytology and a mix of HPV genotyping or other molecular means	
Denmark	Cytology for women 23-59 with HPV as a triage test	Referal to colposcopy if ASC-H, AGC, HSIL, AIS or any malignancy identified	Screening interval 3 yrs for age 23-49 and 5 yrs for age 50-64

#### **Cervical Cancer Screening methods in Developed Countries**

#### **Office Bearers**

**President** Dr Saritha Shamsunder

Hon Secretary Dr Sweta Balani

Joint Secretary Dr Sujata Das

**Treasurer** Dr Mamta Dagar

### **Editorial Board**

**Chief Editor** Dr Aruna Nigam

#### **Co-Editors**

Dr Deepti Goswami Dr Roopa Hariprasad Dr Nisha Singh

### **Media Heads**

Website Dr Bindiya Gupta

Facebook Dr Nikhil Parwate

Whats App Dr Priya Ganesh Kumar

### Forthcoming Conference

14<sup>th</sup> Annual Conference of ISCCP

19<sup>th</sup>-21<sup>st</sup> April, 2019 at Vishakhapatnam

Organizing Secretary: Dr Leela Digumarti digumarti2001@yahoo.com

Country	Primary screen	Triage plan for +hrHPV	Alternate follow up
	Primary HPV testing reserved for woman 60-64	Positive HPV referred to colposcopy, negative testing used to exit population from screening	
England	HPV alone (pilot studies)	neg HPV > rescreen in 3-5 yrs based on age	pos HPV > repeat testing in 1 yr
		pos HPV > cytology, if NILM repeat HPV in 1 yr	
	Triage methods vary by site	pos HPV > cytology, if >/= ASCUS > colposcopy	
		pos HPV > genotyping 16/18	pos 16/18 > immediate colposcopy and repeat HPV testing in 1 yr
Finland	Predominantly Cytology but can be HPV testing	neg HPV > repeat screen in 5 yrs	consideration of 10 yr screen interval based on age and history
		Cytology for pos HPV	
		pos HPV > if >/= LSIL > colposcopy	
		pos HPV > if = ASCUS alternate follow up	Repeat HPV test in 1 yr
Germany	Primary HPV screen optional vs annual cytology vs co-testing undergoing studies	cytology as primary triage	Interval with negative HPV testing, up to 5 yrs
		if ASC-H, AIS, HSIL > colposcopy	pos HPV > repeat cotesting in 1 yr
		if pos HPV and NILM-LSIL > alternate follow up	
		neg HPV and NILM-LSIL > return to routine screening	
Ireland	Co-testing is current standard		Secondary triage and roll out TBD, likely partial genotyping to be included
	Proposed HPV primary testing, unclear roll out time line	Proposed triage with Cytology	
		pos HPV and >/= ASCUS > colposcopy	
Italy	HPV testing (in some regions)	Cytology	HPV testing repeated in 1 year
		neg HPV > rescreen in 5 yrs	neg HPV > rescreen in 5 yrs
		pos HPV > if cytology >/= ASCUS > colposcopy	
Netherlands	HPV testing	Cytology	repeat cytology at 6 months > colposcopy for >/= ASCUS
		neg HPV > rescreen in 5-10 yrs based on age	
		pos HPV > if >/= ASC-US -> colposcopy, if negative alternate follow up	if repeat cytology NILM at 6 months > routine screening
		pos HPV > NILM -> alternate follow up	
Norway	Predominantly Cytology but randomised introduction of HPV testing is underway	neg HPV > screening interval 3 yrs	repeat HPV testing at 12 months
		Cytology for all pos HPV	pos HPV at 12 month > colposcopy
		pos HPV > if >/= ASCUS > colposcopy	
		pos HPV > NILM -> alternate follow up	
Mexico	HPV testing offered in regional pilot studies	partial genotyping and cytology	repeat HPV screening at 18 months
		neg HPV > rescreen in 5 yrs	pos HPV at 18 month > colposcopy
		pos HPV > pos 16/18 > colposcopy	

Country	Primary screen	Triage plan for +hrHPV	Alternate follow up
	Various additional triage methods being studied	pos HPV > if cytology >/= ASCUS > colposcopy	
		pos other HPV with NILM > alternate follow up	
Scotland	Currently Cytology, but HPV testing proposed similar to UK (expected to be available in 2019-2020)	Cytology proposed	repeat HPV testing at 12 months
		neg HPV > re screen in 3-5 yrs based on age	pos HPV at 12 month -> colposcopy
		pos HPV > cytology, if NILM alternate follow up	
		pos HPV > cytology, if >/= ASCUS > colposcopy	
South Africa	Based on resource availability recommendations for Primary cytology, HPV, or VIA	neg hr HPV > rescreen 3-10 yrs based on resource setting or HIV status	follow up intervals based on resource setting and HIV status
		pos hr HPV > genotyping if available, if 16/18 > colposcopy	
		pos hr HPV > cytology or VIA for triage if genotyping unavailable	
Sweden	HPV testing (over age 30)	neg HPV > rescreen in 3 to 7 yrs based on age	repeat HPV screen at 36 months
	Recommendation for co-test at age of 41	pos HPV > if >/= ASCUS > colposcopy	repeat pos HPV > colposcopy
		pos HPV > NILM > alternate follow up	

Chief Editor

**Prof Aruna Nigam** 

Department of Obstetrics and Gynaecology Hamdard Institute of Medical Sciences and Research, Jamia Hamdard, New Delhi prakasharuna@hotmail.com

## **Cervical Cancer Screening in Low Resource Settings**

#### Niharika Sethi<sup>1</sup>, Arpita De<sup>2</sup>

<sup>1</sup>Resident, Department of Obstetrics and Gynaecology, Maulana Azad Medical College, New Delhi, <sup>2</sup>Assistant Professor, Dept. of Obstetrics and Gynaecology, Hamdard Institute of Medical Sciences and Research, New Delhi

#### **Incidence and Cause**

Cervical cancer is a global massacre, it is the fourth most common cancer among women worldwide, with an estimated 528,000 new cases and 266,000 deaths in the year 2012.<sup>1</sup> In India, it is the second most common cancer in women, with an overall 5-year relative survival of 46%.<sup>2</sup>

Primary risk factor is persistent infection with Human Papillomavirus (HPV) especially high-risk oncogenic types 16,18,31 and 33 which cause cellular changes, ultimately leading to cervical intraepithelial neoplasia (CIN).

### Available Tests for Cervical Cancer Screening<sup>3-5</sup>

	VIA/VILI	PAP smear	HPV testing
Procedure	Visualization of the transformation zone or squamocolumnar junction of cervix,1 min after 3–5% acetic acid or Lugol s lodine application with the naked eye or under low-level magnification	Cervical samples obtained by trained health worker, stained and analyzed by a trained cytotechnician or cytopathologist.	Cervical sample obtained by health- care provider (or the woman herself) subjected to tests for detection of high-risk HPV types or the mRNA of E6 or E7 protein
Sensitivity	41–79%	26–70%	66–95%
Specificity	14% to 98% (naked eye) 85–88% (low level magnification)	96–99%	76% -95%

#### **Best Test for Screening**

In developed countries, where extensive infrastructure is available, organized screening programs exist. Existing cervical cancer screening programs in developed countries demonstrated reduction in cervical cancer risk and mortality by 25-76% with regular screening.<sup>6</sup> HPV testing and liquid based cytology (LBC) is the method of choice for obtaining and preparing cervical cells for cytological assessment. HPV testing is established to be most reproducible and sensitive approach with need of little training, particularly well when the prevalence of disease is high. A new approach is the self collection of vaginal specimens for HPV DNA testing which eliminates the drawback of cytology tests with regard to need of human resources and lack of privacy.8 For liquid based cytology, cells are transferred to a preservative and then sample is transported to a laboratory where slide is prepared and same sample can be used for molecular assays of HPV. LBC results in homogeneous, easy to read slides and better handling. However, LBC its more costly than conventional cytology and requires extra instrumentation for slide preparation.

#### Difficulties with Cytology and HPV for Low Resource Settings

Even though cytology (PAP and LBC) has been the main stay of conventional screening, it requires training of cytologists, cytotechnicians, a laboratory, equipment and supplies. It may not be suitable for postmenopausal women due to migration of transformation zone into the cervical canal. A woman has to come back at a later date for results and may have to visit a higher center for further workup and treatment. Therefore, many women may be lost to follow up. In a low resource setting there may be inadequate monitoring of the quality of samples and accuracy of the interpretations as well.<sup>10</sup>

As explained earlier that HPV testing is the most reproducible and sensitive test but its high cost, need for transportation protocols limit their use. The laboratories need to be standardized for reliable results.<sup>9</sup>

#### **Best Approach in Low Resource Settings**

For low-resource settings, the WHO recommends HPV testing with treatment for women with positive test results. Where HPV testing is not available, the WHO recommends visual inspection with acetic acid followed by treatment.

In India FOGSI has laid down few Good Clinical Practice Recommendations (GCPR) for screening<sup>7</sup>, diagnosis and management. The first step is to identify whether the place of screening is in a good or low resource setting. It also lays down strategies for Single Visit Approach Strategies to have a wider and more effective penetration of services for screening.

In Low Resource settings the approach is **Screen and Treat recommendation** and sometimes **See**, **Screen and Treat.** A woman is screened by VIA. VIA is a simple but very sensitive screening test using acetic acid which is freely available. It is an easy to learn test for which even paramedical workers can be trained. No laboratories or special equipments are required thus making it very cost effective. Any suspicious lesions are seen immediately. <sup>12,13</sup> If there is a doubtful lesion and the criteria is fulfilled for ablation, then Ablation is done in the same setting, with or without a cervical biopsy. Ablation can be with cryoprobe, thermal ablation, LEEP or conization.

The goal of a **screen-and-treat** or programme for cervical cancer is to reduce cervical cancer and related mortality with relatively few adverse events. For all screen-and-treat recommendations, cryotherapy is the first-choice treatment for women who have screened positive and are eligible for cryotherapy.<sup>11</sup> After treatment follow up can resume with VIA after one year.

	Good resource Limited resource	
	settings	settings
Modalities	<ul> <li>HPV testing</li> <li>Primary HPV Testing</li> <li>Co-testing</li> <li>Cytology</li> <li>VIA</li> </ul>	VIA (affordable HPV testing may be introduced if feasible)
Target Age Group (Years)	25-65	30-65 (N.B.: In postmenopausal women, screening with VIA may not be as effective)
Age to start (years)	Cytology at 25 Primary HPV testing/ Co-testing at 30	VIA at 30
Frequency	Primary HPV testing or Co-testing-every 5 years Cytology- every 3 years	Every 5 years (at least 1-3 times in a lifetime)
Age to stop (years)	<ul> <li>65 with consistent negative result in last 15 years</li> <li>Women with no prior screening should undergo tests once at 65 years and, if negative, they should exit screening</li> </ul>	
Follow up method after treatment; interval	HPV testing (preferred) or cytology 12 months	VIA 12 months

### FOGSI-GCPR Recommendations for Resource Based Cervical Cancer Screening

Screening following abnormal reports> CIN 2+, irrespective of method of treatment	20 years	
Screening in hysterectomized women	<ul> <li>Following hysterectomy in which cervix was removes for benign cause: no need for screening unless there is history of previous cervical intraepithelial neoplasia (CIN)</li> <li>Absence of cervix must be confirmed by clinical reports or examination</li> <li>If indication for hysterectomy unclear, screening may be performed at clinician's discretion</li> </ul>	
Follow up in women with CIN in hysterectomy HPE report	Need to be screened with HPV at 6 months and 18 months	
Screening of immuno- compromised women	<ul> <li>Start within one year of initiation of sexual activity</li> <li>HPV testing/ contesting/ cytology/VIA</li> <li>Every 2-3 years</li> </ul>	<ul> <li>VIA (affordable HPV testing if available)</li> <li>Every 3 years (at least twice as often as general population</li> </ul>

**Eligibility of See & Treat (Ablative procedures):** The lesion should be entirely visible and confined to not more than two quadrants of the cervix. There should be no vaginal or endocervical extension. There should be no suspicion of invasive cancer. The largest cryotherapy probe should be able to cover the lesions. However Screen and Treat by cryotherapy is contraindicated in women with postcoital bleeding, postmenopausal bleeding, cervix with irregular surface or cervix which bleeds on touch.

However it is important to remember that VIA is the most cost effective approach only till resources for HPV testing are available as it has its own limitations. It has a low positive predictive value and a high false positive rate leading to overtreatment and unnecessary referral in single visit approach. It essentially examines the ectocervix, so it has a low sensitivity in postmenopausal women.<sup>14</sup>

### **Recommended Age and Minimum Frequency** of Screening

The ideal age group to be screened for cervical cancer by VIA is 30-65 years (because of their higher risk of cervical cancer). Additionally, HPV DNA testing is generally not recommended in women younger than 30 years because of spontaneous regression of HPV infections in this age group. In resource limited settings, woman should be screened for cervical cancer by VIA or HPV DNA once in five years or at least once in her lifetime in a resource-poor setting.<sup>11</sup> However in an immunocompromised woman the frequency should be every 3 years.

For women with history of total hysterectomy for benign causes no further screening is required. If the indication is not known then screening is as per the clinician's discretion.

# Screening Program in Other Low Resource Settings

Cervical Cancer Prevention Program in Zambia (CCPPZ), which began in 2006, was a single-visit approach of screening women with visual inspection with acetic acid (VIA) and treating eligible lesions with cryotherapy, for which they trained nurses. Nurses were also trained for use of digital cervicography and distant consultation for uncertain cases. Physicians were trained for LEEP (loop electrosurgical excision procedure). Their approach to increase awareness was by community sensitization via visual aids, educational materials, questionnaires and electronic media. A total of 108,330 women were screened till 2013 and program led to the detection of one case of CIN2/3 for every 100 women screened, one case of Invasive cervical cancer for every 145 (95% CI: 121–172.8) women screened.<sup>15</sup>

### Implementation Issues in Existing Screening Programs

Current challenges in screening are at multiple levels. There is a lack of awareness of cancer screening specially in remote areas. There is a lot of fear resulting in reduced acceptability. Women need to be motivated for repeat visits. There is a lack of standard laboratories and trained techno-cytologists. There is no check of accuracy of reports in many centers. One of the determinants of success of a cervical cancer screening program is the ability to follow up those with positive results or abnormal findings.<sup>16</sup>

#### How These Issues can be Overcome

Ground root workers including ASHA workers need to be mobilized for motivating women to get screened. There is a need for more educational materials including materials in electronic media in local languages. Repeated orientation needs to be done to explain the triage methods in case of positive screening results.

#### References

- 1. GLOBOCAN. (2012). Estimated cancer incidence, mortality and prevalence worldwide in 2012, International Agency for Research on Cancer (IARC), WHO.
- 2. Ferlay J, Soerjomataram I, Ervik M, et al. GLOBOCAN 2012 v1.0

Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 11. Lyon, France: International Agency for Research on Cancer; 2012. http://globocan.iarc.fr 2013. (accessed Feb 24, 2017).

- 3. Arbyn M, Sankaranarayanan R, Muwonge R, et al. Pooled analysis of the accuracy of five cervical cancer screening tests assessed in eleven studies in Africa and India. Int J Cancer 2008; 123: 153–60.
- 4. Almonte M, Ferreccio C, Winkler JL, et al. Cervical screening by visual inspection, HPV testing, liquid-based and conventional cytology in Amazonian Peru. Int J Cancer 2007; 121: 796–802.
- Cuzick J, Bergeron C, von Knebel Doeberitz M, et al. New technologies and procedures for cervical cancer screening. Vaccine 2012; 30 (suppl 5): F107–16.
- Peirson L, Fitzpatrick-Lewis D, Ciliska D, Warren R. Screening for cervical cancer: a systematic review and meta-analysis. Syst Rev 2013; 2: 35.
- FOGSI-GCPR screening and management of preinvasive lesions of cervix and HPV Vaccination. FOGSI Gynaecologic oncology committee January 2018
- Arbyn M, Sankaranarayanan R, Muwonge R, Keita N, Dolo A, Mbalawa CG, et al. Pooled analysis of the accuracy of five cervical cancer screening tests assessed in eleven studies in Africa and India. Int J Cancer 2008;123:153–60
- 9. Agency for Healthcare Policy and Research (AHPR). Evaluation of cervical cytology. Summary, evidence report/technology

assessment: Number 5. Rockville (MD): AHPR, 1999.

- Nanda K, McCrory DC, Myers ER, Bastian LA, Hasselblad V, Hickey JD, et al. Accuracy of Papanicolaou test in screening for and follow-up of cervical abnormalities: A systematic review. Ann Intern Med 2000;16:132::810–9.
- 11. WHO. Comprehensive cervical cancer prevention and control—a healthier future for girls and women—WHO guidance note; Geneva: World Health Organization, 2013.
- 12. Richart R, Robles S, Wright TC, Sankaranarayanan R. Symposium: Cervical cancer screening strategies for developing countries. Contemp Ob Gyn 2001;46:71–9; 100–17.
- 13. Sankaranarayanan R, Budukh AM, Rajkumar R. Effective screening programmes for cervical cancer in low-and middleincome developing countries. Bull World Health Organ 2001;79:954–62.
- 14. JHPIEGO. Training issues for cervical cancer prevention in low resource settings. Baltimore (MD): JHPIEGO, 2000.
- 15. Mwanahamuntu MH, Sahasrabuddhe VV, Blevins M, et al. Utilization of Cervical Cancer Screening Services and Trends in Screening Positivity Rates in a "Screen-And-Treat" Program Integrated with HIV/AIDS Care in Zambia. Harper D, ed. PLoS ONE. 2013;8(9):e74607.
- Rajaraman P, Anderson BO, Basu P, Belinson JL, Cruz AD et al. Recommendations for screening and early detection of common cancers in India. Lancet Oncol. 2015 Jul;16(7):e352-61.

## **Colposcopic Images**

#### Dr Renuka Matti

Consultant Gynaecologist, L H Hiranandani Hospital, Powai and IIT Bombay

#### Image 1



Young 22 year married female referred for abnormal lesion over the cervix. Colposcopic image showing pearly white patch covering the <sup>3</sup>/<sub>4</sub> are around os before application of the acetic acid which became more prominent after that.

Diagnosis: Cervix biopsy showed chronic cervicitis changes with some koilocytic cells. Diagnosis of cervical wart was made

#### Image 2



61 year postmenopausal female presented with vaginal bleeding and foul smelling discharge.

Colposcopic image shown after application of acetic acid revealing dense acetowhite area in and around os. Inner limit of the lesion not visualized. Biopsy from the lesion showed squamous cell carcinoma. Radical hysterectomy was performed.

**Editor's Comments:** It is very important to follow the algorithm of examination of cervix during colposcopy. One should first examine without application of acetic acid i.e. clean the cervical mucus and discharge with saline swab, then examine under green filter, then acetic acid application and finally lugol's iodine. One can miss the diagnosis if the cervix has not been seen before application of acetic acid as in first case. Whenever there is suspicion of wart, one should also carefully examine the vaginal walls and vulva for the evidence of warty lesion, moreover partner history should also be sorted out for any lesions in the genitalia. Cryoablation of the cervical lesion can be done easily and external and lower vaginal lesions can be treated with trichloracetic acid (TCA) application.

## **Journal Scan**

Dr Deepti Goswami

Director Professor, Department of Obstetrics & Gynaecology, Maulana Azad Medical College, New Delhi

#### PLoS One. 2017 Jul 27;12(7):e0181905.

#### Accuracy of Self-collected Vaginal Dry Swabs using The Xpert Human Papillomavirus Assay

Catarino R, Vassilakos P, Bilancioni A, Bougel S, Boukrid M, Meyer-Hamme U, Petignat P.

This study reported from Geneva, Switzerland compared HPV test positivity and accuracy between self-collected sample with a dry swab (s-DRY) versus physician-collected cervical sampling using a broom like brush and immediate immersion in PreservCyt (dr-WET).

The study included 150 women  $\geq$  18 years old attending the colposcopy clinic in the University Hospital of Geneva. Each participant first self-collected a vaginal sample using a dry swab and then the physician collected a cervical specimen in PreservCyt. HPV analysis was performed with Xpert. Part of the PreservCyt-collected sample was used for hrHPV detection with the cobas<sup>®</sup> HPV test. HPV test positivity and performance of the two collection methods was compared.

#### Results

- HPV positivity was 49.1% for s-DRY, 41.8% for dr-WET and 46.2% for cobas.
- Good agreement was found between s-DRY and dr-WET samples (kappa± Standard error (SE) = 0.64±0.09,), particularly for low-grade squamous intraepithelial lesions (LSIL+) (kappa± SE = 0.80±0.17).
- Excellent agreement was found between the two samples for HPV16 detection in general (kappa  $\pm$ SE = 0.91 $\pm$ 0.09) and among LSIL+ lesions (kappa  $\pm$ SE = 1.00 $\pm$ 0.17).
- Sensitivities and specificities for CIN2+ detection with different methods were:
  - s-DRY 84.2% and 47.1%
  - dr-WET -73.1% and 58.7%.
  - cobas- 77.8% and 45.7% .
- The median delay between sampling and HPV analysis was 7 days for the Xpert HPV assay and 19 days for cobas. There were 36 (24.0%) invalid results among s-DRY samples and 4 (2.7%) among dr-WET (p = 0.001). Invalid results happened due to the long interval between collection and analysis.

The authors concluded that self-collected vaginal dry swabs are a valid alternative to collecting cervical samples in PreservCyt solution for HPV testing with the Xpert HPV assay. This might assist in the implementation of an effective screening strategy in developing countries.

Cancer Epidemiol Biomarkers Prev. 2017 Jul; 26(7):1053-1059.

#### Performance and Diagnostic Accuracy of a Urine-Based Human Papillomavirus Assay in a Referral Population

Cuzick J, Cadman L, Ahmad AS, Ho L, Terry G, Kleeman M, Lyons D, Austin J, Stoler MH, Vibat CRT, Dockter J, Robbins D, Billings PR, Erlander MG.

The objective was to determine the performance of the Trovagene HPV test for the detection of CIN2+ from urine and PreservCyt cervical samples.

This study reported from St Mary's Hospital (London, United Kingdom) included women referred for colposcopy following abnormal cytology. A total of 501 paired urine and cervical samples were collected. Primary outcomes were sensitivity for CIN2+/CIN3+ and specificity for <CIN2; secondary outcomes were comparisons with other HPV tests and agreement/ kappa values between urine and cervical samples.

#### Results

- Trovagene HPV test sensitivity and specificity from PreservCyt were similar to well-established tests
  - Sensitivity for CIN3+ (n = 145) 96.3% (95% confidence interval (CI), 89.6-99.2)
  - Sensitivity for CIN2+ (n = 81) 94.5% (95% Cl, 89.4-97.6)
  - Specificity for <CIN2 25.3% (95% CI, 20.8-30.1)]
- Sensitivity from urine was slightly, but not significantly, lower
  - Sensitivity for [CIN3+ 91.4% (95% CI, 83.0-96.5), P = 0.3
  - Sensitivity for CIN2+ 88.3% (95% CI, 81.9-93.0), P = 0.06]
  - Specificity for <CIN2 was similar: 24.7% (95% Cl, 20.3-29.5), P = 0.9
- A total of 403 Trovagene cervical and 396 urine HPV tests were positive.

• Overall agreement between paired samples was 82.6% (95% CI, 79.3-86.0).

The authors concluded that Trovagene HPV test's performance on PreservCyt cervical samples was comparable with established HPV tests. Sensitivity in urine, although slightly lower, may nevertheless be adequate for self-sampling. This may prove useful for women not attending for cervical screening.

#### Gynecol Oncol. 2018 Jun;149(3):491-497.

#### Validation of a New HPV Self-Sampling Device for Cervical Cancer Screening: The cervical and selfsample in screening (cassis) study

El-Zein M, Bouten S, Louvanto K, Gilbert L, Gotlieb W, Hemmings R, Behr MA, Franco EL; CASSIS Study Group.

The authors compared the self-sampling performance of a newly designed device named HerSwab<sup>™</sup> with a physician-collected cervical sample and another selfsample using the cobas<sup>®</sup> PCR Female swab for the detection of cervical intraepithelial neoplasia (CIN) and cancer

- Women referred for colposcopy collected two selfsamples, one with HerSwab<sup>™</sup> and one with cobas<sup>®</sup> swab, after receiving instructions. The order of sampling was randomized.
- At the colposcopy clinic a cervical sample was collected and a colposcopic examination was done.
- All samples were tested for human papillomavirus (HPV) DNA.
- Sensitivity and specificity to detect CIN2+ and respective 95% confidence intervals (CI) were calculated to compare sampling approaches. The HPV testing agreement between samples was measured using the Kappa statistic.

#### Results

- 1217 women were enrolled
- 1076 had complete results for HPV and cytology.
- 148 (13.8%) had CIN1
- 147 (13.7%) had CIN2/3
- 5 (0.5%) had cancer
- There was very good agreement between methods for HPV detection
- HerSwab<sup>™</sup> versus physician: kappa=0.84
- cobas<sup>®</sup> swabs versus physician: kappa=0.81
- HerSwab<sup>™</sup> versus cobas<sup>®</sup> swabs: kappa=0.87
- The sensitivity and specificity of three sampling methods for HPV detection for CIN2+ was:
- Self-sampling with HerSwab<sup>™</sup>: Sensitivity 87.6% (95%CI: 79.8-93.2) and specificity 58.1% (95% CI: 54.1-62.1).
- Self-sampling with cobas<sup>®</sup> swab: Sensitivity 88.6% (95%Cl: 80.9-94.0) and specificity 55.0% (95% Cl: 50.9-59.0)
- Physician sampling: Sensitivity 92.4% (95% Cl: 85.5-96.7) and specificity 58.7% (95% Cl: 54.6-62.6).
- Cytology (ASC-US or more severe) done on the physician-collected specimen was 80.2% (95% CI: 70.8-87.6) sensitive and 61.4% (95% CI: 57.2-65.5) specific for CIN2+.

The authors concluded that, HerSwab<sup>™</sup> had good agreement with physician sampling in detecting HPV, and adequate performance in detecting high-grade lesions among women referred to colposcopy for abnormal cytology.

## **Cervical Cancer News from around The World**

**Dr Roopa Hariprasad** Scientist D, ICMR-NICPR

#### Australia to Eliminate Cervical Cancer by 2028 The Times: 3<sup>rd</sup> October 2018, 5:00pm

Australia is aiming to become the first country in the world to all but eliminate cervical cancer, the fourth most common cancer for women around the world.

It is due to become a rare disease in Australia within two years and so uncommon by 2028 that it will be deemed banished as a public health problem. More than 310,000 women die each year from cervical cancer globally. The forecast is contained in research published in *The Lancet Public Health* journal. The achievement was attributed to the introduction ten years ago of a national vaccination programme for all children for human papillomavirus (HPV) and the launch of a national cervical smear test initiative in 1991.

### US FDA Approves Expanded Use of Merck's Gardasil 9 Vaccine to include Individuals 27 through 45 years old

Pharmabiz.com: 8th October 2018, 17:00 Hrs

The US Food and Drug Administration (FDA) approved a supplemental application for Gardasil 9 (Human Papillomavirus (HPV) 9-valent Vaccine, Recombinant) expanding the approved use of the vaccine to include women and men aged 27 through 45 years. Gardasil 9 prevents certain cancers and diseases caused by the nine HPV types covered by the vaccine.

"Today's approval represents an important opportunity to help prevent HPV-related diseases and cancers in a broader age range," said Peter Marks, MD, PhD, director of the FDA's Center for Biologics Evaluation and Research. "The Centers for Disease Control and Prevention has stated that HPV vaccination prior to becoming infected with the HPV types covered by the vaccine has the potential to prevent more than 90 per cent of these cancers, or 31,200 cases every year, from ever developing.

According to the CDC, every year about 14 million Americans become infected with HPV; about 12,000 women are diagnosed with and about 4,000 women die from cervical cancer caused by certain HPV viruses. Additionally, HPV viruses are associated with several other forms of cancer affecting men and women.

To read more: click on the link: http:// www.pharmabiz.com/NewsDetails. aspx?aid = 1 1 1 6 1 1 & sid = 2 & utm source=Mailer&utm\_medium=ET\_batch&utm campaign=ethealth\_news\_2018-10-09

### **Cervical Check Cancer Test Review 'finds Huge Failings'**

BBC News: 12th September 2018

The Irish government has accepted all 50 recommendations in the review into the Cervical Check cancer test crisis. Dr Gabriel Scally led the review after a smear test audit found 221 cervical cancer patients, 18 of whom died, may have benefitted from earlier treatment. His report was presented to the cabinet on Wednesday and Health Minister Simon Harris said it has found huge failings. He said it identified a huge breach of trust by the non-disclosure of clinical audits to the women affected.

To read more: click on the link: https://www.bbc. com/news/world-europe-45498934?intlink\_ from\_url=https://www.bbc.com/news/topics/ cx1m7zg0gx4t/cervical-cancer&link\_location=livereporting-story

### Cervical Screening Issues causing Delays for Women in East

**BBC News:** 30<sup>th</sup> July, 2018

Patients claim lives are being put "at risk" after it emerged some women are waiting six times the twoweek target to get their smear test results.Cervical screening samples are usually taken at GP clinics before being sent off to laboratories for testing. Samples from the eastern region are taking up to 12 weeks to process by Cambridge University Hospitals. NHS England said it is "working closely" with screening labs to "free up additional capacity".

To read more: click on the link: https://www.bbc. com/news/uk-england-suffolk-45005079?intlink\_ from\_url=https://www.bbc.com/news/topics/ cx1m7zg0gx4t/cervical-cancer&link\_location=livereporting-story

## **Guidelines for Authors**

All members of ISCCP are requested to send manuscripts pertaining to (but not exclusively limited to) to cervical cancer prevention/treatment for publication in the newsletter. The matter should be original and not published/under consideration for publication elsewhere.

This could be in one of following forms:

- 1. Original Article: Articles from original research (including aim, methods, results and discussion), should not exceed 5-6 typed pages, word limit of 1500 words and not more than 10 references. Tables and Figures could be included as per requirement.
- 2. Review Article: The article should not exceed 3-4 typed pages, word limit 2500 words with not more than 8 references.
- **3. Case Report:** An interesting case report which has "take home message", word limit 800 words with not more than 3-5 references. Image should be sent separately in JPEG format
- 4. Report of conferences/ CME? awareness/training camps: up to 300 words with 2-3 images

**References:** References should be recent, relevant, indexed and in Vancouver style. References to literature cited should be numbered consecutively and placed at the end of the manuscript. In the text they should be indicated as superscript. All papers submitted are subject to review process. All accepted papers will be suitably edited before publication.

Submit to: Dr Aruna Nigam, praksharuna@hotmail.com

## **ISCCP Activities**

**Professor Nisha Singh** Department of Obstetrics and Gynaecology, King George's Medical University, Lucknow

**Breast and Cervical Screening activities of Homi Bhabha cancer Hospital & Research Centre, Visakhapatnam, Andhra Pradesh by Dr Lila Digamurthi in July, August and September, 2018:** On 21<sup>st</sup> July and 18<sup>th</sup> August, awareness talks to housewives at the Gajuwaka and Steel Plant townships in association with AIDWA (All India Democratic Women's Association.

August 24<sup>th</sup>: Screening data presented to Vice President Sri M Venkayya Naidu





1<sup>st</sup> September & 22<sup>nd</sup> September: Community screening program at Gajularega, a suburb in Vijayanagaram, 70 women screened by clinical breast examination, 50 VIAs and smears.

2<sup>nd</sup> September: awareness talk and screening at a local apartment complex

**30<sup>th</sup> September:** CME on Gynaecological cancers Dr Geethanjali K Amin from Mumbai gave a talk on Colposcopy in CIN.

#### Dr Nikhil Parawate, September 2018

The cancer prevention activity was conducted by Dr Nikhil Parawate exclusively for all specialties and super speciality doctors in Pune, Maharashtra. This was also done forr ground staff of airport Pune, Maharashtra during september month.





#### Dr Priya Ganesh Kumar, Sai Niwas centre, Thane

Cervical and Breast cancer screening camp at slums of Kalwa, interior of Thane district, Mumbai with VIA and CBE. Around 75 ladies were screened with VIA on 18<sup>th</sup> August 2018.



**Cervical Cancer Prevention Camp at Sant Parmanand Hospital, Delhi** on 29<sup>th</sup> April, 2018: Primary HPV screening was taken on 63 women screened which revealed 6.3% women positive for high risk HPV.

**Comprehensive Colposcopy Course by AICC RCOG NZ on 27<sup>th</sup> & 28<sup>th</sup> May, 2018 under the aegis of ISCCP & NARCHI at Sant Parmanand Hospital:** The course was approved by the IFCPC. The course was attended by 87 doctors (55 delegates & 32 Faculty).



Public Awareness Camp on cervical & Breast Cancer Screening/Adolescent Health organized by Institute of Obstetrics And Gynaecology, Sir Ganga Ram Hospital under the aegis of ISOPARB, ISCCP, AOGD, NARCHI AND IMS on 16/09/18 at Geeta Sanatan Dharm Mandir, Kirti Nagar, New Delhi. Lecture on prevention of cervical cancer and prevention of breast cancer lectures was given by Dr Mala Srivastava. bout 120 delegates and patients were present.





A Cancer Prevention Camp was organised under ISCCP and **Sai Vilayatrai Sai Jivatsing Sai Visandas Charitable trust** by **Dr Gajaria Rajni** from Mumbai on 2<sup>nd</sup> September, 2018. Total patients screened were 54. VIA 17 one positive, PAP 15 and 11 HPV Tests were done. 11 girls registered for vaccination.



Live Colposcopy Workshop was organised under aegis of ISCCP at Rajasthan State Conference of NARCHI at Jaipur on 5<sup>th</sup> August, 50 delegates attended.



**Cancer Screening Programme at MCH Center, Uttam Nagar** was organised under aegis of ISCCP and NARCHI Delhi on 23<sup>rd</sup> June. Awareness lectures were given and total 42 patients were screened.

**Department of Obstetrics and Gynaecology, HIMSR, Delhi: Dr Aruna Nigam** has started lecture series on the "Cervical Cancer Screening and HPV Vaccination: Need of the Hour" under the aegis of ISCCP, to increase the awareness regarding the same among school, college and universities in and around Delhi. 3 of them have been taken till now on 11th Sept at HIMSR, Delhi, 8<sup>th</sup> October at Unani School of Medicine, 15<sup>th</sup> October at rehabilitation Sciences and physiotherapy, Jamia Hamdard. 50 students have been vaccinated after 1<sup>st</sup> lecture





# Indian Society of Colposcopy & Cervical Pathology

Cervical Pathology & Colposcopy.)

Membership Become a lifeember of ISCCP and get latest updates and newsletter.

Life

## Announces

## **ISCCP Certified Training**

Supervised Hands on Training in Colposcopy with Log Book and Exit Exam

### **For Enguiries Contact:** Hon Secretary, ISCCP

🔀 swetagarima@gmail.com

09811395800/07982924001



## 14th Annual Conference of ISCCP-ISCCP2019 In Association with the Obs & Gyn Society of Vizag

## On 19th, 20th and 21st April 2019 at

Hotel Novotel Varun Beach, Visakhapatnam Andhra Pradesh, India

### Theme:

Benchmarking Cervical Cancer Prevention and Screening

Organising Secretary: Dr. Digumarti Leela

## Conference Highlights:

Workshops and Scientific Deliberations With National and International Faculty from South-Fast Asian countries & IARC

- digumarti2001@yahoo.com isccpconference2019@gmail.com
- 😧 9246374354, 0891 2871 556

## 17th World Congress of International Federation of cervical Pathology and Colposcopy

1-4th Oct 2020 at HICC Hyderabad

## For details log in to www.isccp.in