



OPPORTUNISTIC SCREENING OF CERVICAL CANCER IN TERTIARY CARE CENTRE

Dr Gopalkrishna B Huilgol

Professor, Dept. Of Obstetric And Gynecology, Bangalore Medical College And Research Institute , Bengaluru

Dr Rohini D K*

Post Graduate Student, Bangalore Medical College And Research Institute, Bengaluru.
*Corresponding Author

ABSTRACT **OBJECTIVE:** The objective of the study is for detection of precancerous lesions of cervical cancer using Pap smear screening method. **METHODS:** women who visited the outpatient clinic of Obstetrics and Gynecology department , BMCRI with different clinical problems over a period of 9 months from oct-2017 to june-2018 were recruited for the study. A detail history, clinical examination with per speculum and per vaginal examination were performed. Pap smear was obtained using Ayre spatula and spread over glass slide using 95% ethyl alcohol fixator and sample was sent for cytopathological examination. **RESULTS:** 2003 Pap smear samples were examined, out of that 96.95% were inflammatory smears (negative for malignancy), 0.74%- LSIL, 0.34%- HSIL, 1.04%- ASCUS. Women with Pap smear report positive for LSIL, HSIL, ASCUS were advised to undergo cervical biopsy/colposcopy. **CONCLUSION:** Pap smear screening is simple, non-invasive, cost effective method for detection of precancerous lesions of cervical cancer in gynecological patients.

KEYWORDS : pap smear, LSIL, HSIL

AIMS AND OBJECTIVES

For detection of precancerous lesions of cervical cancer using Pap smear screening method.

NEED FOR THE STUDY

- Cervical cancer is a preventable disease due to the long pre-invasive stage.
- Early detection and appropriate treatment are possible if robust screening is implemented.
- Early cervical epithelial changes can be identified by a Pap smear test, which is the primary screening test for detection of precancerous cervical intraepithelial neoplasia and the early stage of invasive cervical cancer.

METHOD AND MATERIALS

- This is a prospective descriptive study carried out over 9 months from October 2017 to June 2018 at the Department of Obstetrics and Gynaecology, BMCRI Bangalore. We screened for 2003 women who are more than 21 yrs.
- Women with different complaints, including vaginal discharge, blood-mixed discharge, foul-smelling discharge, postcoital bleeding, intermenstrual bleeding, postmenopausal bleeding, abdominal pain, infertility, and secondary amenorrhea, were included in this study.
- A detailed history was taken using a predetermined proforma that included the chief complaint and the findings of per speculum and vaginal examinations.

METHODOLOGY

- Patients were placed in the lithotomy position, and a sterile bivalve speculum was inserted into the vagina.
- The posterior vaginal wall was retracted posteriorly and the anterior vaginal wall anteriorly to allow proper visualization of the cervix and vaginal wall.
- The smear was obtained using an Ayre spatula and cyto brush and spread over a marked glass slide, which was placed in 95% ethyl alcohol and sent to the Department of Pathology for cytopathological examination.
- All data were recorded using a predetermined proforma.

STATISTICAL ANALYSIS

- Data collected are analyzed by descriptive statistical methods using mean, median, and standard deviation, Chi-square test is used for association of categorical variables.

AGE DISTRIBUTION

AGE IN YEARS	NO. OF PATIENTS	PERCENTAGE
21-30	125	7%
31-40	274	14%
41-50	578	28%
51-60	601	32%

61-70	327	17%
-------	-----	-----

RELIGIOUS DISTRIBUTION

RELIGION	NO. OF PATIENTS	PERCENTAGE
MUSLIM	677	34%
HINDU	1326	64%

GEOGRAPHIC DISTRIBUTION

GEOGRAPHIC AREA	NO. OF PATIENTS	PERCENTAGE
URBAN	717	36%
RURAL	1286	64%

SYMPTOMATIC DISTRIBUTION

SYMPTOMS	NO. OF PATIENTS	PERCENTAGE
WHITE DISCHARGE	768	38.34%
IRREGULAR CYCLES	584	29.15%
PAIN ABDOMEN	426	21.36%
ASYMPTOMATIC	197	9.83%
POST MENOPAUSAL BLEED	20	0.99%
POST COITAL BLEED	8	0.39%

RESULTS

CYTOLOGY REPORT ACCORDING TO AGE DISTRIBUTION

AGE IN YEARS	INFLAMMATORY	LSIL	HSIL	ASCUS	TOTAL
21-30	123	1	0	1	125
31-40	268	1	1	4	274
41-50	571	3	1	3	578
51-60	586	5	2	12	605
61-70	323	1	2	1	327
>70	54	1	1	0	56

CYTOLOGY	NO. OF PATIENTS	PERCENTAGE
INFLAMMATORY	1942	96.95%
LSIL	12	0.74%
HSIL	7	0.34%
ASCUS	21	1.04%
ATROPHIC	16	0.79%
UNSATISFACTORY	24	1.19%

- 2003 Pap smear samples were examined, out of that 96.95% were inflammatory smears (negative for malignancy), 0.74% - LSIL, 0.34% - HSIL, 1.04% - ASCUS. Women with Pap smear report positive for LSIL, HSIL, ASCUS were advised to undergo cervical biopsy/colposcopy.

DISCUSSION:

- The Pap smear test used as a screening method to detect cervical cancer is an effective way to prevent the development of cervical cancer, but awareness within the community about the Pap smear test is very low. If not diagnosed and treated early, these precancerous lesions are likely to progress to invasive cancers.
- In our study conducted in Obstetric and Gynecology department, BMCRI, Bengaluru over a period of 9 months from October 2017 to June 2018 around 2003 women were examined and screened for cervical cancer using Pap smear.
- A study conducted by Lakshmi, et al 200 Pap smear were taken out of which 134 were inflammatory, 15 - LSIL, 13 - moderate dysplasia, 12 - HSIL, 8 were negative for inflammatory smears and 2 were squamous cell carcinoma.
- In our study 2003 Pap smear samples were examined, out of that 96.95% were inflammatory smears (negative for malignancy), 12 - LSIL, 7 - HSIL, 21 - ASCUS. Women with Pap smear report positive for LSIL, HSIL, ASCUS were advised to undergo cervical biopsy/colposcopy.
- By conducting health camps, increasing health awareness and performing Pap smear screening programmes the incidence of cervical carcinoma can be decreased.

CONCLUSION:

- Pap smear testing is a useful, simple, economical and safe tool for detecting precancerous cervical epithelial lesions. It should be established as a routine screening procedure to reduce the treatment burden, morbidity, and mortality.
- Every woman above the age of 21 years should undergo routine cervical cancer screening, even into the postmenopausal period.
- The Pap test has been regarded as the gold standard of cervical screening programs.
- When the Pap test is combined with an HPV DNA test, the sensitivity for detection of cervical pathology is increased.
- The community should be educated about the Pap smear test, including its goal and the required frequency of application, by widespread educational and media programs.

REFERENCES:

1. Ferlay J, Soerjomataram I, Dikshit R, Eser S, Mathers C, Rebelo M, et al. Cancer incidence and mortality worldwide: Sources, methods and major patterns in GLOBOCAN 2012. *Int J Cancer* 2015;136:E359-86.
2. Bruni L, Barrionuevo-Rosas L, Albero G, Aldea M, Serrano B, Valencia S, et al. ICO Information Centre on HPV and Cancer (HPV Information Centre). Human Papillomavirus and Related Diseases Reports. Available from: <http://www.hpvcentre.net/statistics/reports/XWX.pdf>. [Last accessed on 2015 Mar 20].
3. Kulkarni PR, Rani H, Vimalambike MG, Ravishankar S. Opportunistic screening for cervical cancer in a tertiary hospital in Karnataka, India. *Asian Pac J Cancer Prev* 2013;14:5101-5.
4. Bhutia K, Puri M, Gami N, Aggarwal K, Trivedi SS. Persistent inflammation on Pap smear: Does it warrant evaluation? *Indian J Cancer* 2011;48:220-2.
5. Barouti E, Farzaneh F, Sene A. The pathogenic microorganism in Papanicolaou vaginal smears and correlation with inflammation. *J Family Reproduct Health* 2013;7:23-7.