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# Study of Association of Gynaecological Morbidities and Cervical Dysplasia Among Rural Women


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**ABSTRACT**

*Introduction: Cervical cancer is the second most common cancer among women inIndia in. contributes about 25-30% of all cancer cases. Aims and objectives: . To study the gynaecological morbidities associated with cervical dysplasia . TO study the status of hygiene among them. material and methods: Cross sectional study ,All married women above 18 years of age attending of and undergoing Pap smear were included; A total 474 women were included in the study Per-vaginum and per-speculum was collected in the Performa. Pap smear was was obtained.Composite score was evolved by allotting score 1 to presence of practice and zero to its absence. Total score was between 0-8.Result and discussion: Majority of women with dysplasia complaint off (P/V) white discharge (74.07%), low backache (25.93%), and majority of the women with dysplasia / cancer cervix has vaginal discharge (23.46%) followed by cervicitis 13 (16.05%), erosion 13 (16.05%)and there is significant association between poor hygienic practices and dysplasia p<0.001. Conclusion: symptoms like p/v discharge and backache shold not be neglected and reproductive hygiene needs to improved among rural women by giving health education*


**KEYWORDS: cervical dysplasia, gynecological morbidity, hygiene status**

Introduction: Cervical cancer is most common cancer in developing countries; about 80% of total cases are present in developing countries[1].

In India cervical cancer contributes about 25-30% of all cancer cases. Percentages of age adjusted rates per 1 lakh women for cervical cancer in 1997 at 6 population based cancer registries are as follows.

| Place | Bangalore | Bhopal | Chennai | Delhi | Mumbai | Barshi |
|---|---|---|---|---|---|---|
| % | 21.6 | 20.7 | 29.8 | 24.1 | 17.0 | 22.0 |

Various other risk factors for cervical cancer are early age at marriage, coitus before the age of 18 years, multiple sexual partner, delivery of the first baby before the age of 20 years, multiparty with poor birth spacing between pregnancies, poor personal hygiene and women with STD, HIV infection, herpes simplex virus 2 and human papilloma virus (HPV) (16, 18, 31, 33)[2] infection.

Cytological screening technique as advocated by papnicolaou and co-workers offers as simple and economic way to detect these dysplastic lesions at earliest stage without the use of elaborative technique.

In India, 75% of population is residing in rural area where in addition to factors like multiparty, early age at marriage, poor genital hygiene, other factor like negligence by patient to initial symptoms like leucorrhoea, postcoital bleeding; unawareness of symptoms, illiteracy and lack of adequate screening facilities are present which increases incidence among Indian women.

**Aims and objectives:**

1. TO study the proportion of cervical dysplasia among rural women .
2. to study the gynaecological morbidities associated with cervical dysplasia .
3. TO study the status of hygiene among them.

Material and methods: This was a Cross sectional study was carried out from 1st August 2006 to 31st July 2007,at Gynaecology outpatient department of tertiary health care centre in rural area of Marathwada ,Maharashtra,for a period of one year. All married women above 18 years of age attending of and undergoing Pap smear during 1st August 2006 to 31st July 2007 were included in the study., A total 474 women were interviewed out of them 12 women whose Pap smear was not reported because of some reasons like scanty smear, or slide number not matched with that of registration number and Pregnant women were excluded. Clearance of ethical committee was taken at the beginning of the study. Pre-tested proforma specially designed for this purpose was used for interviewing the study subjects. Per-vaginum and per-speculum examination were done and information was collected in the Performa. Pap smear was obtained in each case from squamocolumnar junction of the Slides stained and graded according to papnicolaou method . During data collection opportunity was utilized to give health education regarding personal hygiene.

**Hygienic practices:** Hygienic practices adopted routinely and during menstruation were noted. Total 8 factors were included as follows.

A) Usual hygienic practices:
1) Daily bathing
2) Enclosed bathroom available
3) Washing of genitals after micturation
4) Washing of genitals after coitus

B) During menstruation
1) Use of Sanitary Pads/Cloths/Any other
2) Regular washing of cloths.
3) Abstinence from intercourse
4) Changing of Napkin or Cloth 3 times a day.

Composite score was evolved by allotting score 1 to presence of practice and zero to its absence. Total score was between 0-8, women were divided into 3 categories depending upon score as follows.

Score 0-2 : Poor hygiene
Score 3-5 : Fair hygiene
Score 6-8 : Good hygiene

**Results :**

Table No. 1: Distribution of women according to outcome of Pap smear.

| Sr. No. | Outcome of the Pap test | No. of women | Percentage |
|---|---|---|---|
| 1. | Normal smear | 124 | 26.83 |
| 2. | Inflammatory smear | 239 | 51.73 |
| 3. | Mild dysplasia | 31 | 06.70 |
| 4. | Moderate dysplasia | 12 | 02.59 |
| 5. | Severe dysplasia | 14 | 03.05 |
| 6. | Carcinoma in situ | 01 | 00.24 |
| 7. | Frank invasive cancer | 23 | 04.97 |
| 8. | Others | 18 | 03.89 |
| Total | | 462 | 100% |

Mean age = 38.71± 11.90 of the women participated in this study

Prevalence of dysplasia was about 10.78% in 20-29 year of age group, 13.13% in 30-39, 16.81% in 40-49 years, 35.71% in 50-59 years of age, 32.56% in 60-69 years of age and 50% above 70 years of age.

Prevalence of dysplasia increases with the increase in the age.

**Table No. 2: Distribution of women undergoing Pap smear according to presenting complaint.**

| Sr. No. | Presenting complaint | No. of women without dysplasia/ Cancer cervix (%) N=381 | No. of women with dysplasia/ Cancer cervix (%) N=81 | Total N=462 |
|---|---|---|---|---|
| 1. | P/V white discharge | 250 (65.61) | 60 (74.07) | 310 (67.09) |
| 2. | Low backache | 183 (48.03) | 21 (25.19) | 204 (44.115) |
| 3. | Pruritis | 44 (11.55) | 09 (11.11) | 53 (11.47) |
| 4. | Bleeding per vaginum | 41 (10.67) | 10 (12.35) | 51 (11.03) |
| 5. | Lower abdominal pain | 39 (10.24) | 05 (6.17) | 44 (9.5) |
| 6. | Urinary complaint | 42 (11.02) | 1 (1.23) | 43 (9.30) |
| 7. | Postmenopausal bleeding | 21 (5.51) | 09 (11.11) | 30 (6.49) |
| 8. | Something coming out vagina | 22 (5.77) | 07 (8.64) | 29 (6.27) |
| 9. Postcoital bleeding | | 07 (1.84) | 2 (2.47) | 9 (1.94) |
| 10. | Intermenstrual bleeding | 01 (0.26) | 4 (4.94) | 5 (1.08) |
| 11. | Any other | 06 (1.57) | 01 (1.23) | 07 (1.51) |

(Any other includes patient with infertility 3, dysparenia 1, distention of abdomen 2, secondary infertility 1)

Majority of women with dysplasia complaint off (P/V) white discharge (74.07%), low backache (25.93%), bleeding (P/V) (12.35%), postmenopausal bleeding and pruritis (11.11%) each and prolapse (8.64%).

**Table No. 3: Distribution of women undergoing Pap smear according to per vaginum finding (lesion).**

| Sr. No. | Per vaginum finding | Women without dysplasia/ Cancer cervix (%) N=381 | Women with dysplasia / Cancer cervix (%) N=81 | Total (%) N=462 |
|---|---|---|---|---|
| 1. | Discharge (cervical) | 108 (20.08) | 19 (23.46) | 127 (18.18) |
| 2. | Erosion | 75 (19.69) | 13 (16.05) | 98 (21.21) |
| 3. | Cervicitis | 35 (9.19) | 13 (16.05) | 48 (10.38) |
| 4. | Bulky uterus | 42 (11.02) | 06 (7.40) | 48 (10.38) |
| 5. | Congestion | 32 (8.39) | 1 (1.23) | 33 (7.14) |
| 6. | Spontenous bleeding | 11 (2.89) | 12 (14.81) | 23 (4.97) |
| 7. | Growth | 03 (0.79) | 12 (14.81) | 15 (3.24) |
| 8. | Prolopse | 09 (2.36) | 4 (4.94) | 13 (2.81) |
| 9. | Bleeds on touch | 03 (0.79) | 9 (11.11) | 12 (2.59) |
| 10. | Atrophic uterus | 09 (2.36) | 03 (3.70) | 12 (2.59) |
| 11. | Polyp | 09 (2.36) | 0 (0.00) | 09 (1.94) |
| 12. | Hypertrophied cervix | 07 (1.84) | 1 (1.23) | 08 (1.73) |
| 13. | Cervix healthy | 08 (2.10) | 0 (0.00) | 08 (1.73) |
| 14. | Hard cervix | 04 (1.04) | 1 (1.23) | 05 (1.08) |

Above table shows distribution of women according to per-vaginum finding (lesion).

It was observed that in majority of the women with dysplasia / cancer cervix vaginal discharge (23.46%) followed by cervicitis 13 (16.05%), erosion 13 (16.05%), spontaneous bleeding (14.81%) and growth on cervix 12 (14.81%) cervix bleeds on touch (11.11) was found as associated lesion while women without dysplasia had discharge (20.08%) followed by erosion (19.69%, bulky uterus (11.02%), cervicitis (9.19%), congestion (8.39%) as major (P/V) findings.

**Table No. 4: Distribution of women according to hygienic practices.**

| Sr. No. | Hygienic practices | No. of women without dysplasia/ Cancer cervix (%) | No. of women with dysplasia /Cancer cervix (%) | Total (%) |
|---|---|---|---|---|
| 1. | 0-2 (Poor) | 46 (60.53) | 30 (39.47) | 76 (16.45) |
| 2. | 3-5 (Fair) | 326 (86.70) | 50 (13.29) | 376 (81.38) |
| 3. | 6-8 (Good) | 09 (90.00) | 1 (10.00) | 10 (2.16) |
| Total | | 381 (82.46) | 81 (17.53) | 462 (100) |

$x^2 = 16.53$ df = 1 $p<0.001$

It was observed that there is significant association between poor hygienic practices and dysplasia $p<0.001$. 376 (81.36%) women had fair hygienic while 76 (16.45%) were with poor hygienic practices and only 10 (2.16%) were with good hygienic practices.

**Discussion:**

outcome of Pap smear examinations out of total 462 women 124 (26.33%) had normal smear, majority i.e. 239 (51.73%) were having inflammatory smear, percentages of mild, moderate and severe dysplasia was found to be 31 (6.7%), 12 (2.59%) and 14 (3.05%) respectively. 23 (4.97%) women had frank cancer while only 1 women found to have carcinoma in situ. Observation of present study were comparable with the observation of Arun Chitale et al (1989)[3], S. Dwivedi et al (1991)[4], B. M. Nene et al (1999)[5]. The age of married women in present study ranged between 20-70 years, majority i.e. 160 (34.63%) of the women were between 30-39 years of age group, Prevalence of dysplasia increases with the increase in the age. S. Upreti et al (1981)[6] revealed that 45.8% women with dysplasia were in 4th decade and 28.15% in 5th decade. Sushila Rathee et al (1983)[7] observed that mean age for cervical dysplasia and carcinoma was 46.6 years and 53.3 years respectively. Majority of women with dysplasia complaint off (P/V) white discharge (74.07%), low backache (25.93%), bleeding (P/V) (12.35%), postmenopausal bleeding and pruritis (11.11%),Ansuya Rao et al (1973)[8] observed that 371 (11.89%) women of mild dysplasia, 27 (0.86%) of severe dyplasia and 120 (3.05%) of frank cancer cervix were having irregular menstrual bleeding as complaint and leucorrhoea is next associated symptom. Sushila Rathee et al (1983)[7], found that maximum number of cases of dysplasia i.e. 4 (26.8%) and carcinoma cervix (14.3%) were complained of irregular menstrual bleeding followed by leucorrhoea (21.5%).K. Jayant et al (1994)[9], observed that of the total patient with dysplasia 21% presented with the complaint of leucorrhoea. It was observed that in majority of the women with dysplasia / cancer cervix, vaginal discharge (23.46%) followed by cervicitis 13 (16.05%), erosion 13 (16.05%), spontaneous bleeding (14.81%) and growth on cervix 12 (14.81%) cervix bleeds on touch (11.11) was found as associated lesion.

Ansuya Rao et al (1973)[8], found that highest incidence of dysplasia was in cases with cervicitis i.e. 177 (12.64%) followed by cervical erosion in 8.8% women.

Sushila Rathee et al (1983)[7], found that majority of the patient i.e. 35.7% with dysplasia had cervical erosion followed by unhealthy cervix that bleeds on touch in 21.5% and 7% cases of carcinoma cervix had unhealthy cervix.

V. K. Singh et al (1983)[10], revealed that of the total cases of cervical erosion, 52 (65%) had grade II and 11 (13.75%) had grade III cervical dysplasia.

It was observed that there is significant association between poor hygienic practices and dysplasia $p<0.001$

Dutta et al (1990)[11], observed that chances of developing cancer cervix among women with poor genital hygiene was 2.5 times more as compared to those with better standard of hygiene $p<0.05$.

Vaishali Patil et al (2001)[12], noted that study subjects with poor genital hygiene were at significant risk of development of cervical cancer ($p<0.0001$).

Hemali Heidi et al (2001)[13], found that out of total 757 women 60%, clean genitalia after urination and 92% used homemade pad during menstruation.

## REFERENCES

1. Cervical Cancer Screening in developing countries, report of a WHO Consultation, 2002. | 2. Howkins and Bourne: Shaw's textbook of gynaecology, 13th Edition, Elsevier Publication, 76-77, 2002. | 3. Arun Chitale et al: "Incidence of early cervical neoplasia in women attending a general hospital". Journal of Obstetric and Gynaecology of India, Vo. 44 (3):445-449, 1989. | 4. S. Dwivedi et al: "Cytoepidemiological study of cervical dyskeratosis amongst women with cervical erosion". Indian Journal of Maternal and Child Health, Vol. 2 (1): 18-22, 1991. | 5. B. M. Nene et al: "Experience in screening for cervical cancer in rural areas of Barshi Tahsil, Maharashtra". The Indian Journal of Cancer, Vol. 31 (1), 34-40, 1994 | 6. S. Upreti et al: "A study of cervical dysplasia and its relation with various factors". Journal of Obstetric and Gynaecology of India, Vol. 31, 834-836, 1981. | 7. Sushila Rathee et al: "Detection of uterine cervical dysplasia and carcinoma cervix by cervical smears-A Clinicopathological analysis of 1181 cases". Journal of Obstetric and Gynaecology of India, Vol. 34, No. 6 : 863-867, 1983. | 8. Ansuya Rao et al: "Early detection of cervical cancer by vaginal cytology", Journal of Obstetric and Gynaecology of India, Vol. 23 (3), 315-323, 1973. | 9. V. K. Singh et al: "Vaginal cytology, histology and colposcopy in postmenopausal women". Journal of Obstetric and Gynaecology of India, Vol. 33, No. 3: 379-383, 1983. | 10. .K. Jayant et al: "Personal hygiene in groups with varied cervical cancer rates: a study in Bombay". Indian Journal of Cancer, Vol. 24: 47-52, 1987. | 11. Dutta et al: "A case control study of cancer cervix in patient attending commod hospital, Pune". Indian Journal of Cancer, Vol. 27: 101-107, 1990. | 12. Vaishali Patil et al: "Genital hygiene and risk of cancer cervix". Journal of Obstetric and Gynaecology India, Vol. 51: 132-133, 2001. | 13. Hemali Heidi et al: "Sociodemographic profile and clinical evaluation of RTI'S in rural women of Patna". Journal of Obstetric and Gynaecology of India, Vol. 51 (6): 124-126, 2001. |