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RESEARCH ARTICLE

A HOSPITAL BASED CERVICAL PAP SMEAR STUDY IN DISTRICT PATHANKOT

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Abstract

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Introduction:-

Cancer of uterine cervix is a leading cause of mortality and morbidity among women world- wide. In developing countries it is the most common gynecological cancer and one of the leading causes of cancer death among women. Nearly 4 lacs new cases of cervical cancers are diagnosed annually worldwide and 80% of them are diagnosed in the developing countries. There are 1.7 million cases in the developing world and as many as 5-13 million women have precancerous lesions(1, 3). According to National Cancer Registry Program of India, cancers of uterine cervix and breast are leading malignancies seen in Indian women(2). Cervical cancers can be prevented through early detection using several screening techniques. Cervical smear is a sensitive test for early screening of the cervical lesion and most widely used system for describing PAP smear result is TBS [2014, The Bethesda System].(4)

The study was conducted to explore various lesions of Uterine cervix , to find out target age group in which screening efforts can be concentrated for early detection as well as reduction of the incidence of cervical cancer, in our set up.

Material & Methods:-

The study was carried out at Civil hospital, Pathankot, during March, 2021 to August,2021, total 120 patients were screened. The patients were in the age range of 15-70 years, having complaints like vaginal discharge, bleeding per vagina or something coming out per vagina. History and symptoms along with parity were recorded. Both ectocervix and endocervix were sampled. Slides were prepared, labeled, fixed in 95% ethyl alcohol immediately and subsequently stained by Pap stain. After staining, slides were mounted with DPX (distrenedibutyl phthalate xylene), screened and reported acc to The 2014 Bethesda system.

Results:-

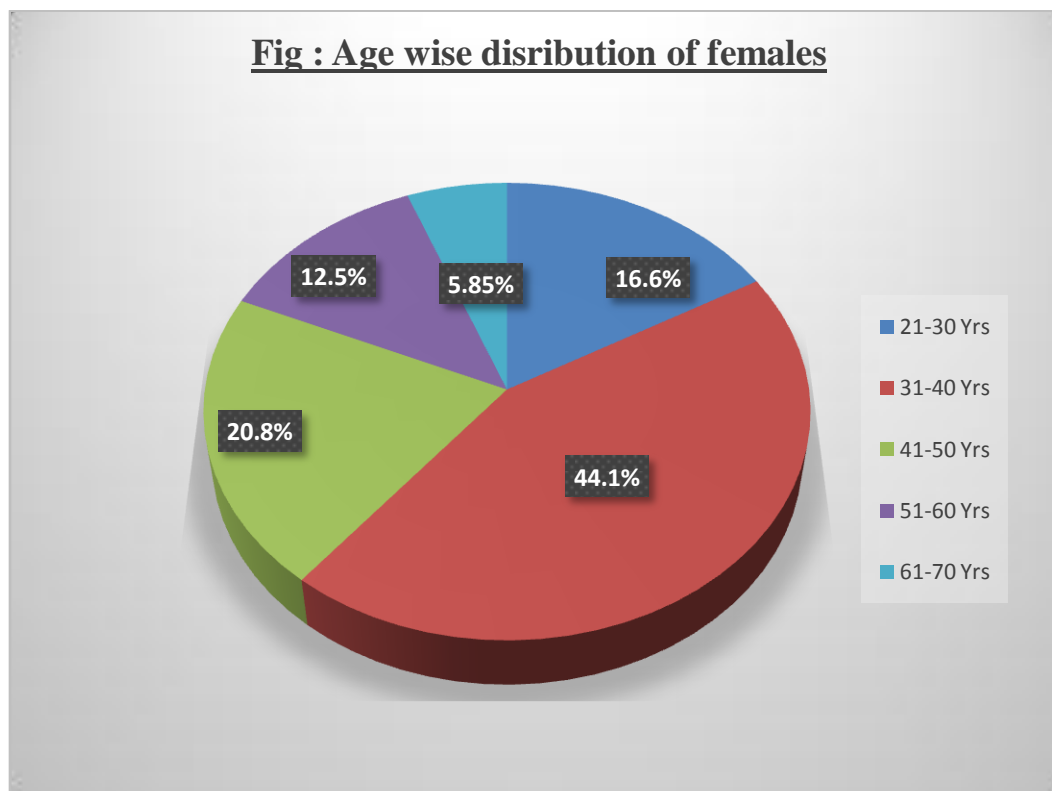
Out of 120 pap smears studied ,the results are divided into inflammatory smear, metaplasia , smears with no remarkable pathology , atrophic smears , infections and other premalignant and malignant lesions. Premalignant lesions were present most commonly in 31-40 year of age group. Malignant lesions were present equally in 31-40 and 51-60 year age group. Infections were present mostly in 41-50 year age group.

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Table 1:- Age wise distribution of females.

Age (in years)	No. of Females	Percentage
21-30	20	16.66
31-40	53	44.16
41-50	25	20.83
51-60	15	12.5
61-70	07	5.85
Total	120	100%

**Table 2:-** Distribution of cytopathological lesions.

Diagnosis	No. of cases	percentage
NRP/NILM	20	16.66
Inadequate	05	4.16
Inflammatory	30	25
Vaginosis	12	10
Candida	07	5.83
Atrophy	16	13.33
Metaplasia	20	16.66
Radiation	1	0.83
LSIL	2	1.66
HSIL	3	2.5
SCC	4	3.33
Total	120	100%

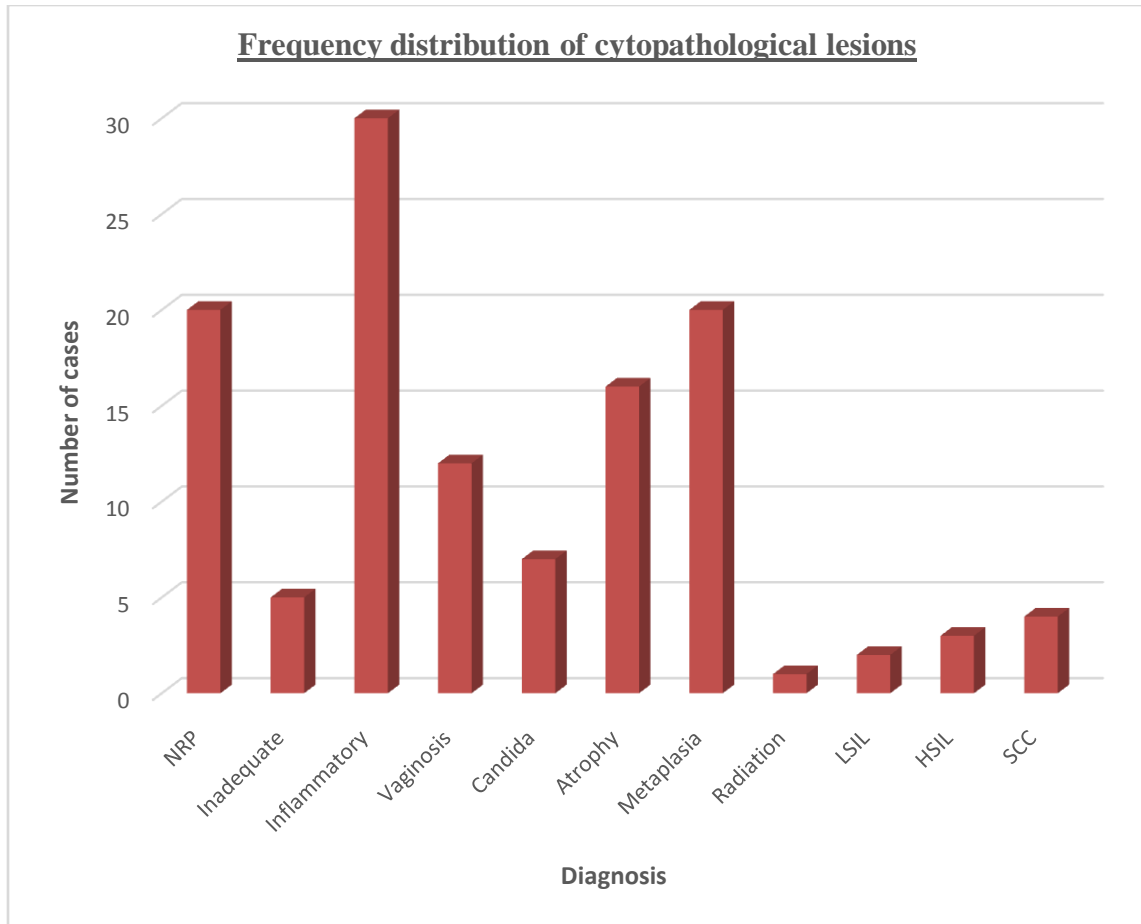


Table 3:- Relation of age with various non-neoplastic and neoplastic pathology of cervix.

Lesions	21-30	31-40	41-50	51-60	61-70	percentage
NILM/NRP	3	8	7	2	-	16.66
Inadequate	1	2	2	-	-	4.16
Inflammatory	4	24	2	-	-	25
Atrophy	--	-	4	5	7	13.33
Metaplasia	9	8	3	-	-	16.66
Radiation change	-	-	-	1	-	0.83
LSIL	-	2	-	-	-	1.66
HSIL	-	1	-	2	-	2.5
SCC	-	2	-	2	-	3.33
Vaginosis	2	3	5	2	-	10
Candida	1	3	2	1	-	5.83

Discussion:-

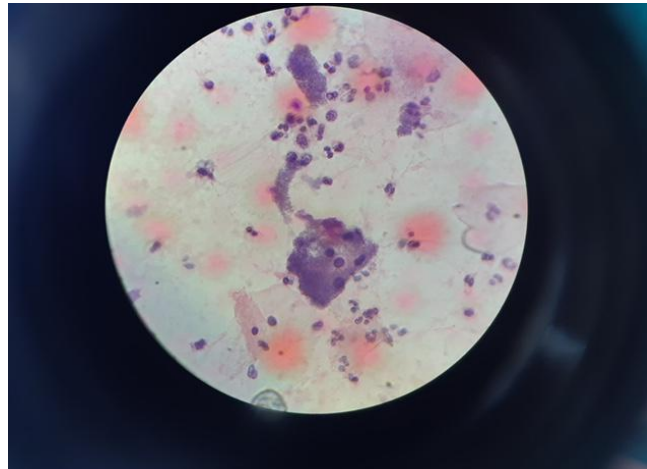
With the changes in the life styles and demographic profiles in developing countries, non-communicable diseases are emerging as an important health problem which demand appropriate control programme before they assume epidemic propagation. Cancer has been a major cause of morbidity and mortality. According to National Cancer Registry Program of India, cancers of uterine cervix and breast are the leading malignancies seen in females of India. There should be an effective mass screening programme aimed at specific age group for detecting precancerous conditions before they progress to invasive cancers(1, 3, 5). Our study showed that there were 75 % benign and inflammatory and 25% were premalignant and malignant lesion, out of which premalignant lesions were LSIL and HSIL. LSIL progresses to HSIL AND SCC.(1, 6, 7) There are various screening test for cervical cancer

like Pap smear, liquid Pap cytology, automated cervical screening techniques, visual inspection of cervix after Lugol's Iodine and acetic acid application, speculoscopy, cervicography. Out of all these, exfoliative cytology has been regarded as the gold standard for cervical screening programs.(10) The role of HPV in development of cervical cancer is proved beyond doubt. If Pap screening is associated with HPV-DNA testing than we can increase the sensitivity. World Health Organization (1992) recommended screening every woman once in her lifetime at 40 years, The American Cancer Society recommends that all women should begin cervical cancer screening after 3 years of beginning coitus. It is also recommended every 1-2 years, women who have crossed the age of 30 years and have had 3 consecutive normal Pap results may be screened after 2-3 years.

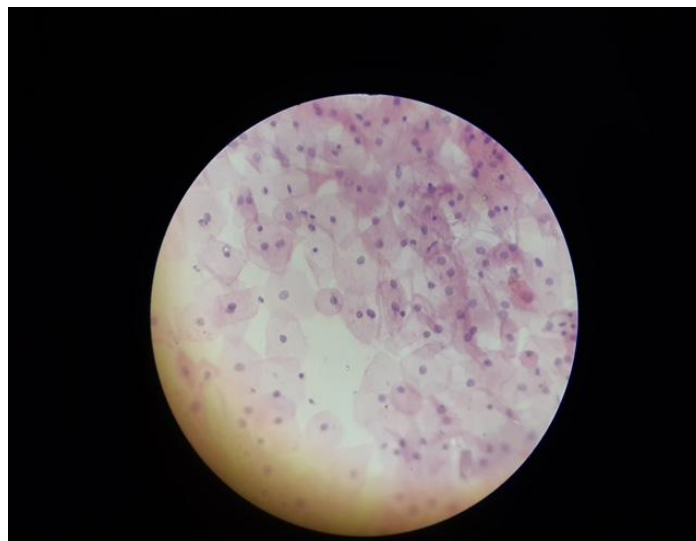
Conclusion:-

Pap smear examination is widely accepted screening method. In countries like India with predominant rural population is having low socio-economic status, marriage at an early age and poor medical facility. It is a major challenge to formulate a screening program that is easily available, within existing resources, to a large section of society. It is also important to set clear and realistic long term goals. We can develop a cost effective screening method by training medical and paramedical staff at primary health centre level. PAP smear examination should begin at 30 years.It should be subsequently followed with HPV-DNA testing at higher centres.

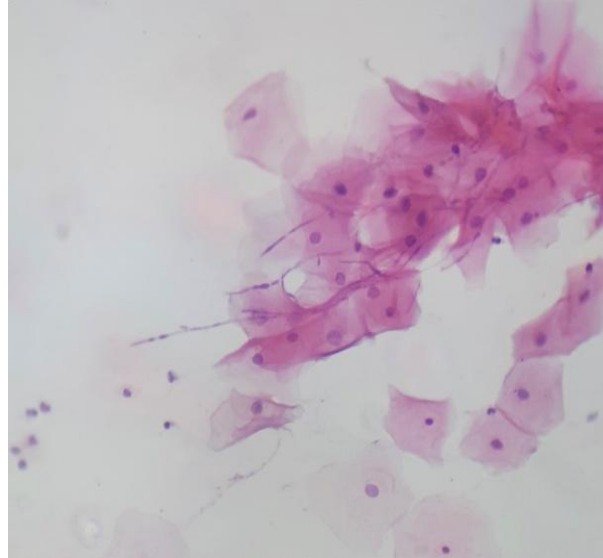
Images:



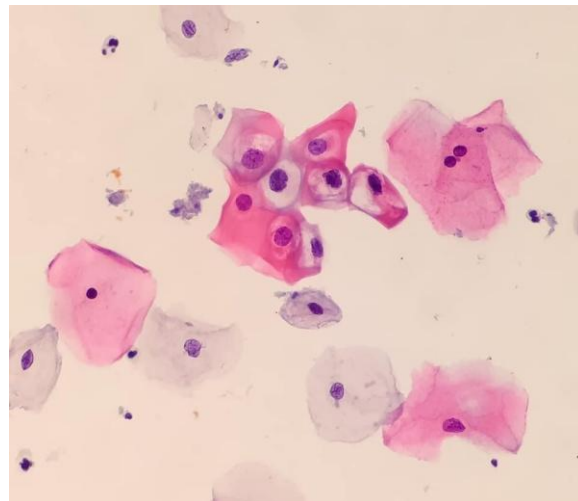
Bacterial Vaginosis



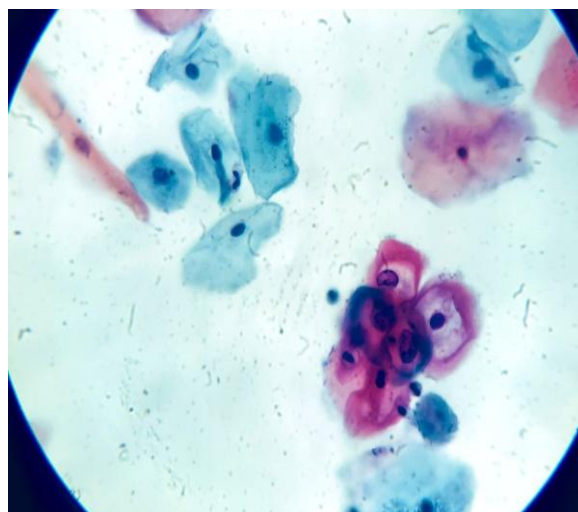
NILM/NRP



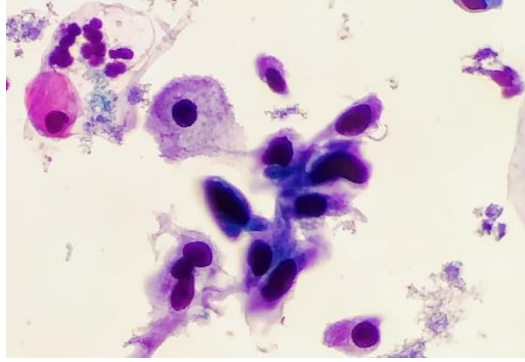
Candida



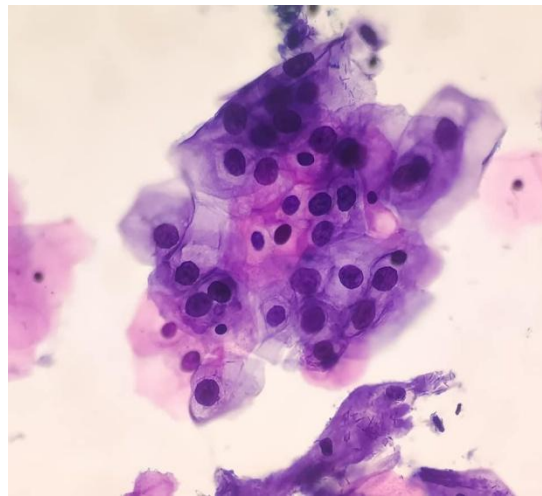
Metaplasia



LSIL



HSIL



Squamous Cell Carcinoma

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