

Original Research Article

Study of spectrum of lesions of cervix in hysterectomy specimens

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Abstract: Hysterectomy is most commonly performed gynecological surgery for various pelvic pathologies like chronic pelvic pain, dysfunctional uterine bleeding and malignancies, since early twentieth century. The present study is aimed at a detailed histopathological evaluation of all lesions of uterine cervix in hysterectomy specimens in the Department of Pathology, SVS Medical College & Hospital, and Mahabubnagar. All specimens after fixation in 10% buffered formalin, processed and then stained with Hematoxyllin & Eosin to study various histopathological patterns. Common clinical indications for hysterectomy were white discharge, pelvic pain and per vaginal bleeding. Most common pathology identified was chronic nonspecific cervicitis. Histopathological study of uterine cervix lesions are mandatory in establishing the early final diagnosis and management. So our study is aimed at study of age wise distribution, incidence, clinical presentation and all lesions of cervix including inflammatory and neoplastic.

Keywords: Hysterectomy, histopathology, cervix

INTRODUCTION

Incidence of non-neoplastic and neoplastic lesions of cervix varies according to different age groups. Cancer of the uterine cervix is an important cause of morbidity and mortality among women worldwide and a leading public health problem. In India, cancer of the uterine cervix is the most frequent neoplasm among women, accounting for 20%-50% of all female cancers and 80% of all female genital cancers [1].

AIMS AND OBJECTIVES

1. To know the incidence of various types of lesions of cervix.
2. To study the distribution of inflammatory and neoplastic lesions of cervix and correlation with clinical diagnosis.
3. To study the various clinical presentations of lesions of cervix.
4. To study the age distribution of lesions of cervix.

METHODS

This is an observational study of 200 cases conducted in the Department of Pathology. Clinical details of the patients were obtained from gynecology

department. The specimens were fixed 10% fresh formalin. After fixation, the specimen was examined grossly and multiple bits were taken from representative sites, processed, slides were prepared & stained with routine by H & E stain.

RESULTS

From tables-1, 2, 3, 4 found that inflammatory lesions were the most common cervical lesions (chronic nonspecific cervicitis and polypoidal endo cervicitis). These lesions were commonly found in the age group of 31-50 years. Chronic nonspecific cervicitis was associated with other changes like nabothian cysts and squamous metaplasia.

Grossly, of the 9 cases of carcinoma cervix, 5 cases (55.5%) were exophytic and 4 cases (44.5%) were endophytic. Microscopically, 3 cases (33.3%) were invasive well differentiated SCC of Cervix, 2 cases (22.2%) were invasive poorly differentiated SCC of Cervix and 4 cases (44.5%) were invasive adenocarcinoma cervix. The cervical findings encountered were CNSC in 181 cases (90.5%), nabothian cysts in 25 cases (12.5%), 2 cases (1.0%) Leiomyoma cervix / leiomyomatous cervical polyp, endocervical polyp in 2 cases (1.0%), 16 cases (8.0%)

of cervical dysplasia and 5 cases (2.5%) of SCC of cervix & 4 cases (2.0%) of adenocarcinoma cervix.

Table 1: Distribution of presenting symptoms

Symptoms	No. of Cases
White discharge	140
Abdominal pain	20
Backache	20
Per vaginal bleeding	11
Post coital bleeding	05
Polyp cervix	04

Table 2: Histopathological distribution of cervical lesions

CNSC (Chronic nonspecific cervicitis) and polypoidal endo cervicitis.	181	90.50
NC (Nabothian cysts)	25	12.50
Endocervical polyp	02	01.00
Cervical dysplasia (CIN I-6, CIN II-6, CIN III-4)	16	08.00
Leiomyoma –Cx	02	01.00
SCC – Cervix	05	02.50
Adenocarcinoma-Cx	04	02.00

Table 3: Shows the age distribution of carcinoma cervix in the study group.

S. no	Age in years	No. of cases	Percentage %
1	31-40	02	22.20
2	41-50	02	22.20
3	51-60	05	55.60
	Total	09	100

Table 4: Distribution according to Gross findings of carcinoma cervix in the study group

Sl.NO	Type of growth	No. of cases	Percentage %
1	Exophytic	05	55.50
2	Endophytic	04	44.50
	Total	09	100

DISCUSSION

Table 5: Shows the incidence of Cervical Dysplasia

S.No	Study	No.Of Cases	Percentage%
1	John.J. Molitor [3]	1/281	0.36
2	Kasturi Lal <i>et al.</i> ; [2]	2/35	5.71
3	(Mrs) M.L.Solapukar [5]	14/551	2.54
4	VeenaS Naik <i>et al.</i> ; [4]	3/108	2.88
5	Our study	16 / 200	8.0

In the Present study, the incidence of cervical dysplasia was 16 cases (8.0%) of 200 cases. Low incidence was noted in the John J.Molitor series with

0.36% and high incidence was noted in kasturi lal *et al.*; studies.

Table 6: Shows peak age incidence of carcinoma cervix

S.No	Study	Age
1	Rama Kanta Das [6]	45-55
2	Our study	51-60

In the Present study, the peak age incidence of carcinoma cervix was noted between 51 and 60 years with 5 cases (55.6%) which are comparable to that of the Corscaden series in which it was between 45 and 55 years. The incidence of carcinoma cervix in the Present study was 9 cases (4.5%) of the total 200 cases. Low incidence was noted in the M. L. Solapurkar series with 2 cases (0.36%) of the total 551 cases and a high incidence was noted in the Kasturi Lal *et al.*; series with 3 cases (8.57%) of 35 cases.

The Present study was comparable to that of Gautam Allahbadia *et al.*; with 3 cases (3%) of 100 cases. Of the total 9 cases in the Present study, 5 cases were clinically diagnosed as carcinoma cervix. The associated endometrial findings in carcinoma cervix in the Present study were that of proliferative type. In the Present study, 2 cases (1.6%) of leiomyoma of cervix were noted. According to Usha et al S, benign tumors of the cervix constitute about 37.9% of all the benign tumors of uterine corpus and cervix. Leiomyoma of cervix were seen in 7 cases (6.03%) in the Usha et al series.

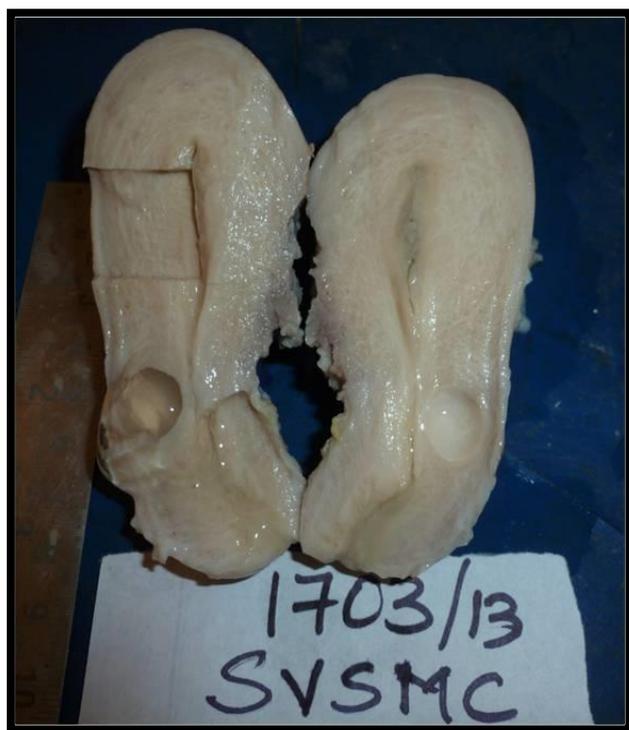


Fig 1: Nabothian cyst



Fig 2: Endocervical polyp



Fig 3: Leiomyomatous polyp



Fig 4: Cervix growth

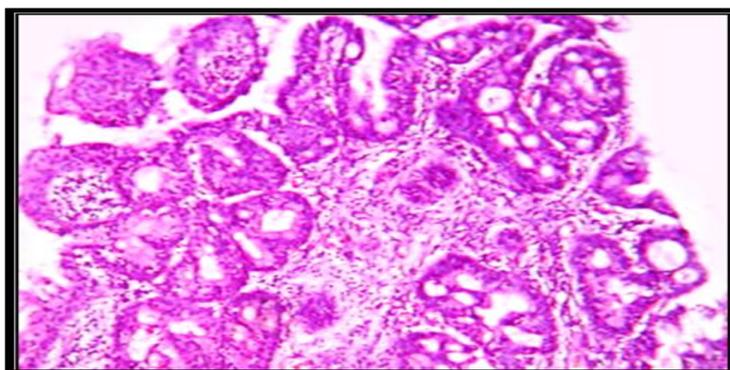


Fig 5: Polypoidal endocervicitis

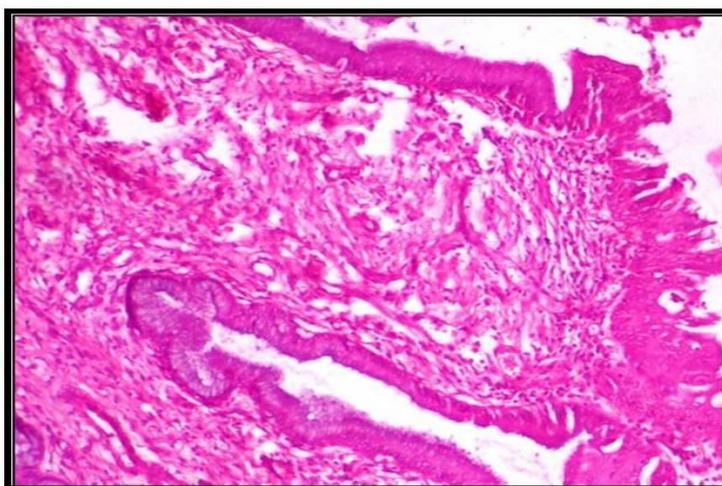


Fig 6: Squamous metaplasia

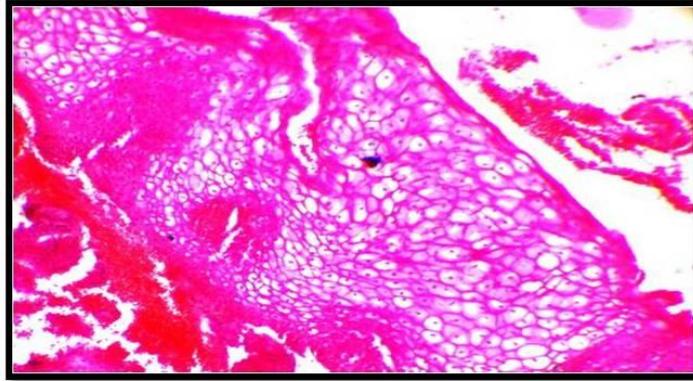


Fig 7: LSIL

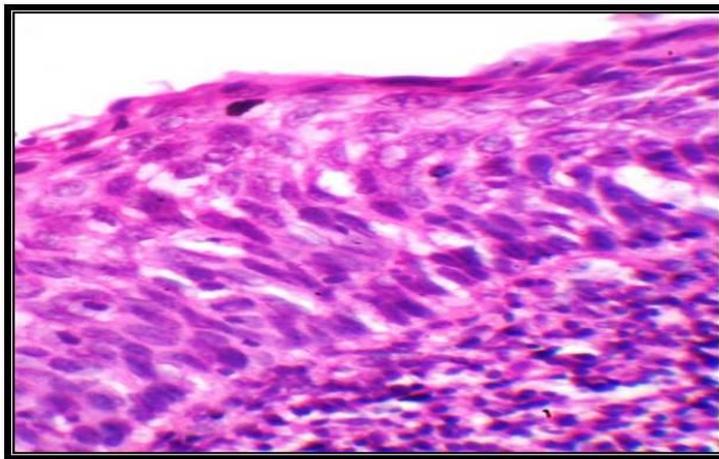


Fig 8: HSIL

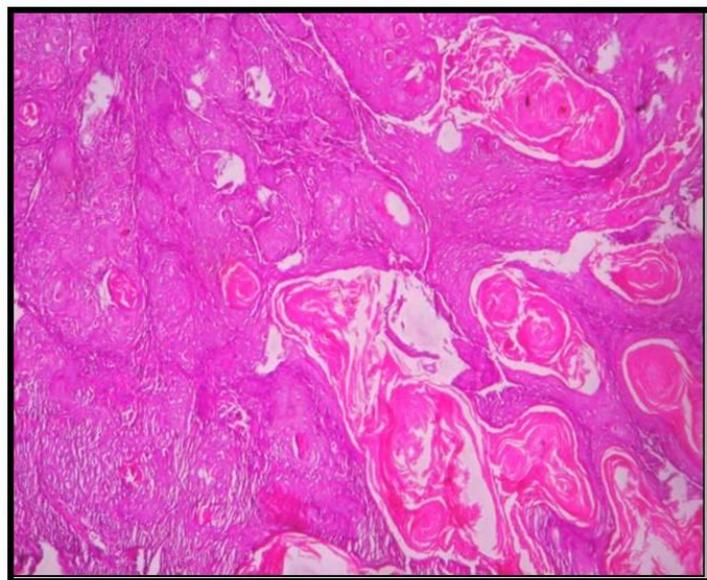


Fig 9: Well differentiated Squamous cell carcinoma

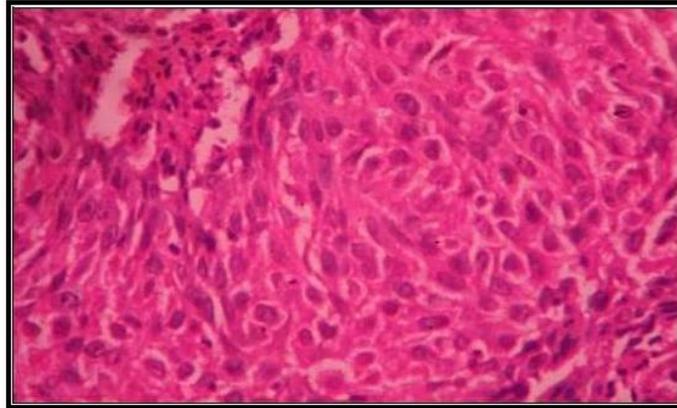


Fig 10: Poorly differentiated Squamous cell carcinoma

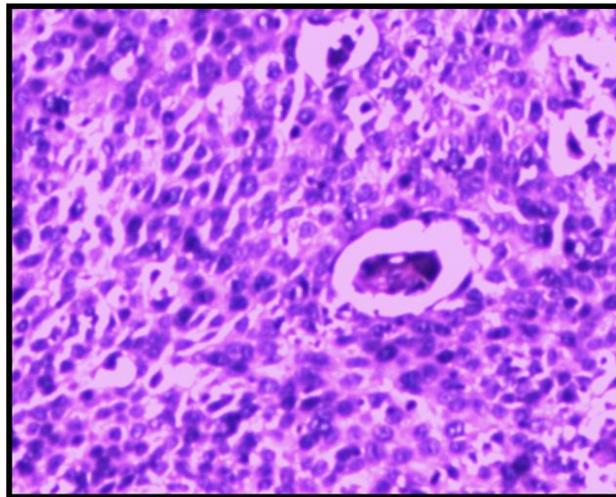


Fig 11: Large cell non keratinizing SCC

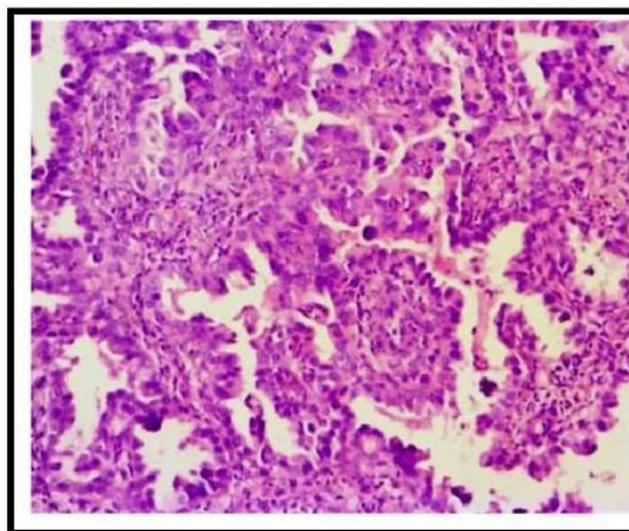


Fig 12: Adenocarcinoma cervix

CONCLUSION

In our study there was a very high clinicopathological correlation when the clinical diagnosis were cervical polyp (100%), prolapse (90%). The clinical and pathological correlations are poor when cervical dysplasia was the clinical diagnosis. Clinicopathological correlation in the study is (67%) which is closer to that of Khan and Sultana study (2010) [7].

This is similar to two year study done by Saleh.S and Fram.K 2011 [8] in 137 women who underwent hysterectomy. Hence it is mandatory that every hysterectomy specimen, even if it is grossly appears to be normal, it should be subjected to detailed histopathological examination. So histopathological examination is mandatory for confirming the diagnosis and thus ensuring the proper management.

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