ORIGINAL RESEARCH

Non- neoplastic and neoplastic lesions of uterine cervix

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ABSTRACT
Background: The uterus has a pyriform shape and is separated into the cervix and body. Ectocervix and endocervix are the two types of cervix. The present study was conducted to assess non neoplastic and neoplastic lesions of uterine cervix. **Materials & Methods:** 90 specimens received from hysterectomy, cervical biopsy, cervical polypectomy from department of obstetrics &gynecology were formalin fixed & paraffin embedded tissue sections were used for microscopic study. Microscopic findings were recorded and histopathological diagnosis were made. **Results:** Cervical specimens were 22 cervical biopsy, 60 hysterectomy and 8 polypectomy. The difference was significant (P< 0.05). Non- neoplastic inflammatory lesions were inflammatory seen in 60, non-neoplastic cervical glandular lesions in 12 cases. Neoplastic lesions were benign in 10, precursor lesionsin 5 and malignant lesions in 3 cases. The difference was significant (P< 0.05). Inflammatory lesions were acute cervicitis in 8, chronic non- specific cervicitis in 32 and chronic papillary endocervicitis in 20 cases. Benign lesions were endocervical polyp in 6, fibroepithelial polyp in 4 and leiomyomatous polyp in 2 cases. The difference was significant (P< 0.05). **Conclusion:** The gold standard for diagnosis is histological analysis of the biopsy specimen. The most prevalent cancers of the female genital tract are cervical cancers.
Key words: Gynecology, Non- neoplastic, Uterus

INTRODUCTION

The uterus has a pyriform shape and is separated into the cervix and body. Ectocervix and endocervix are the two types of cervix. The squamo-columnar junction is the intersection of the squamous and columnar epithelium that line the ectocervix and the endocervix, respectively, at the external os. Gynecological specimens make up a significant amount of the workload in the majority of histopathology departments.[1] Invasive carcinoma may result from viral infections and other carcinogens that target the cervix. One of the most frequent clinical problems in gynecologic practice is infection, which may be brought on by ongoing contact to vaginal germs.[2]

Cervical non-neoplastic disorders are primarily inflammatory, though they can occasionally clinically mimic cancer.[3,4] Therefore, classification and acquaintance with the histomorphological characteristics of cervical non-neoplastic lesions are crucial for their identification and may enhance the strategy for better patient care. Additionally, additional difficulties can be avoided by detecting these non-neoplastic lesions early.[5] For a conclusive diagnosis of cervix illnesses, histopathological examinations and clinical correlation are crucial. Non-representative cervix sampling and cell transference from the collection instrument to the glass slide are two of the intrinsic drawbacks of cervical cytology that still exist today.[6]The present study was conducted to assess non neoplastic and neoplastic lesions of uterine cervix.

MATERIALS & METHODS

The present study comprised of 90 specimens received from from department of obstetrics &gynecology.

Data such as name, age, gender etc. was recorded. Tissue sections that were paraffin embedded and formalin fixed were used for microscopic analysis. Haematoxylin and eosin stains were applied to the sections. Where needed, special stains such as PAS and mucicarmine were used. Histopathological diagnoses were determined after microscopic

observations were documented. Tumors were histopathologically classified using the W.H.O. 2014 standards. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of specimens

Specimens	Number	P value
Cervical biopsy	22	0.01
Hysterectomy	60	
Polypectomy	8	

Table I shows that cervical specimens were 22 cervical biopsy, 60 hysterectomy and 8polypectomy. The difference was significant (P< 0.05).

Table II Histopathological distribution of lesions of cervix

Lesions	Variables	Number	P value
Non- neoplastic	Inflammatory	60	0.01
	Non-neoplastic cervical glandular lesions	12	
Neoplastic	Benign	10	0.05
	Precursor lesions	5	
	Malignant	3	

Table II, graph I shows that non- neoplastic inflammatory lesions were inflammatoryseen in 60, non-neoplastic cervical glandular lesions in 12 cases. Neoplastic lesions were benign in 10, precursor lesions in 5 and malignant lesions in 3 cases. The difference was significant (P< 0.05).

Graph I Histopathological distribution of lesions of cervix

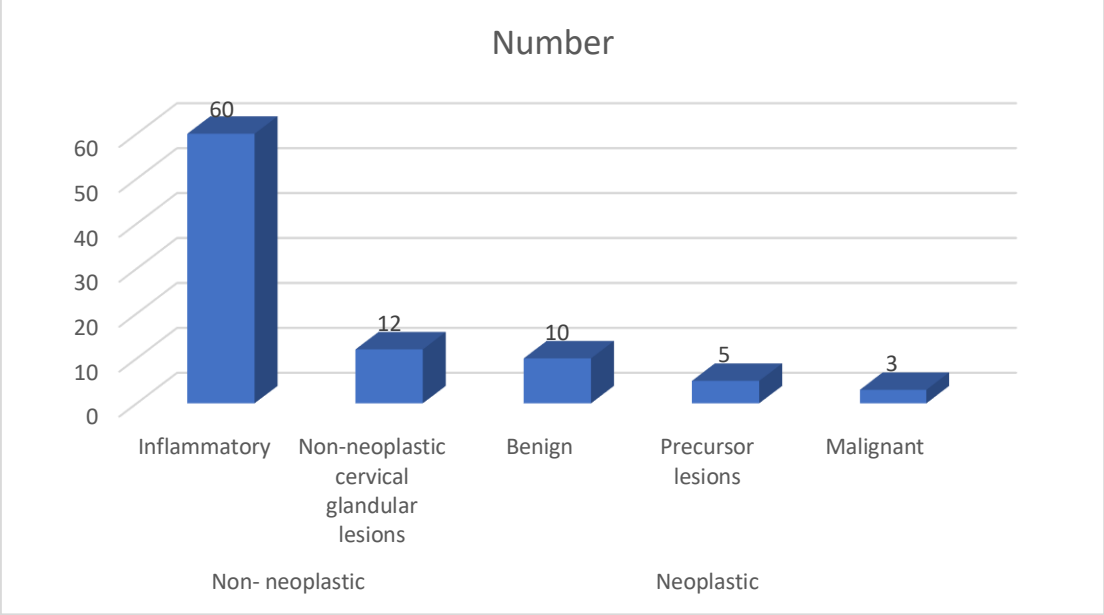

Table III Inflammatory and benign cervical lesions

Lesions	Variables	Number	P value
Inflammatory	Acute Cervicitis	8	0.04
	Chronic non- specific cervicitis	32	
	Chronic papillary endocervicitis	20	
Benign	Endocervical polyp	6	0.72
	Fibroepithelial polyp	4	
	Leiomyomatous polyp	2	

Table III shows that inflammatory lesions were acute cervicitis in 8, chronic non- specific cervicitis in 32 and chronic papillary endocervicitis in 20 cases. Benign lesions were endocervical polyp in 6, fibroepithelial polyp in 4 and leiomyomatous polyp in 2 cases. The difference was significant (P< 0.05).

DISCUSSION

The spindle-shaped cervix is around 2.5 cm in length, or somewhat longer.[7] The majority of gynecological specimens collected by the histology department are either from hysterectomies or continue to produce cervical tissue.[8,9] Cervical pathology patients may present with lower abdomen pain, backache, vaginal discharge, or no symptoms at all.[10]The present study was conducted to assess non neoplastic and neoplastic lesions of uterine cervix.

We found thatcervical specimens were 22 cervical biopsy, 60 hysterectomy and 8polypectomy. Verma et al[11]assessed the histopathological features of varied uterine lesions, their profile and distribution of different lesions in relation of age. A total of 3576 histopathology samples were received in this period. There were 1173 gynaecology samples during this period out of which 22% (261 cases) were that of hysterectomy. Histopathology diagnosis showed leiomyoma in 48.6% (127 cases), adenomyosis was seen in 10.3% (27 cases), endometrioid adenocarcinoma was seen in 1.14% (3 cases).

We found thatnon- neoplastic inflammatory lesions were inflammatory seen in 60, non-neoplastic cervical glandular lesions in 12 cases. Neoplastic lesions were benignin 10, precursor lesionsin 5 and malignant lesions in 3 cases. According to Baral et al[12], 300 specimens in all were examined. Thirteen (9%) of the patients under 40 had benign alterations and pregnancy-related problems, 34 (23%) had abnormal physiologic changes, and 73 (50%) were normal. Abnormal physiological alterations, benign conditions, and normal physiological changes were 45 (32%), 41 (29%), and 37 (26%), respectively, in the 40–55 age range. Three (21%) malignant and three (21%) benign diseases were found in the age group above 55. This age group included 5 (36%) poor samples.

We found thatinflammatory lesions were acute cervicitis in 8, chronic non- specific cervicitis in 32 and chronic papillary endocervicitis in 20 cases. Benign lesions were endocervical polyp in 6, fibroepithelial polyp in 4 and leiomyomatous polyp in 2 cases. In their study, Domblae V et al[13] discovered that the most frequent clinical complaint was vaginal discharge (40.00%), which was followed by bleeding complaints (23.38%). 32.51 percent had a grossly normal cervix, while 20.07% had nabothian follicles. Chronic cervicitis was the most prevalent pathology (79.66%) on histopathological testing. Grey lesions ranging from cervical dysplasia to cancer can be found on the cervix. However, benign lesions make up the majority of cervical diseases. Nonetheless, benign tumors are frequently misidentified as cancerous. Clinical observations and histopathological analysis are essential for an early and precise diagnosis. There should be health camps, cervical screenings, and educational awareness campaigns.

The limitation the study is small sample size.

CONCLUSION

Authors found that the gold standard for diagnosis is histological analysis of the biopsy specimen. The most prevalent cancers of the female genital tract are cervical cancers.

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