

ORIGINAL ARTICLE

Histopathological Analysis of Lesions of Uterus and Cervix

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ABSTRACT:

Background: The uterus is prone to develop several non-neoplastic and neoplastic conditions during the life time of a woman. The present study was conducted to analyze the histopathological examination of the hysterectomy specimens. **Materials & Methods:** The present study was conducted on 518 specimens received in last 6 months. The specimens underwent processing in the tissue processor overnight. Blocks were made and sections were cut into 4 micron thickness in the microtome. These sections were stained by routine stain of hematoxylin and eosin. **Results:** Age group 20-30 years comprised of 102 lesions, 30-40 years had 132, 40-50 years had 170, 50-60 years had 70 and >60 years had 44 lesions. The difference was significant ($P < 0.05$). There was endometrial atrophy in 65, simple hyperplasia in 70, chronic endometritis in 32, endometrial polyp in 38 and normal findings in 105 cases. Lesions of myometrium included leiomyoma in 115, adenomyosis in 24 and leiomyosarcoma in 32 cases. Cervix lesions were cervical loop in 12, carcinoma cervix in 8 and squamous metaplasia in 17 cases. **Conclusion:** Authors found that most common histological finding was leiomyoma and age group 40-50 years revealed more lesions.

Key words: Adenomyosis, Histopathology, Leiomyoma.

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INTRODUCTION

The uterus is prone to develop several non-neoplastic and neoplastic conditions during the life time of a woman. The uterus consists of endometrium and myometrium which is under the influence of different hormones periodically. Many studies have shown many different types of lesions in the ovaries and fallopian tubes. The cervix is prone to many non-neoplastic and neoplastic conditions which are mostly seen in the reproductive age group. All these diseases are seen across all age groups and contribute significantly to increased morbidity and mortality amongst women.¹

Hysterectomy is the most commonly performed gynaecological surgery worldwide and prevalence of hysterectomy varies from country to country region to region. It may be abdominal, vaginal or laparoscopic. It helps in adequate sampling of the required and suspected areas and thus helps in diagnosis of various lesions without any error of sampling.² Hysterectomy provides definitive cure to a wide range of gynecological diseases, both benign and malignant. The indications to perform this major surgery should always be justified and the pathology should be proved histopathologically. This is so because the hysterectomy is a major surgery which has its own

physical, economic, emotional, sexual and medical significance to the women.³ Histopathological analysis and review is mandatory to evaluate the appropriateness of the hysterectomy. Histopathological analysis of the hysterectomy specimens is mandatory for diagnostic purposes and to assess the pattern of lesions common in the uterus and adenexa in a particular population.⁴ The present study was conducted to analyze the histopathological examination of the uterus and cervix specimens.

MATERIALS & METHODS

The present study was conducted in the department of general pathology. It comprised of 518 specimens received in last 6 months. The study protocol was approved from the institutional ethical committee.

The specimens underwent processing in the tissue processor overnight. Blocks were made and sections were cut into 4 micron thickness in the microtome. These sections were stained by routine stain of hematoxylin and eosin. Each slide was then meticulously examined by two independent pathologists to overcome bias. Results were then subjected to statistical analysis. P value less than 0.05 was considered significant.

RESULTS

Table I Age wise distribution of specimens

Age group (years)	Number	P value
20-30	102	0.01
30-40	132	
40-50	170	
50-60	70	
>60	44	
Total	518	

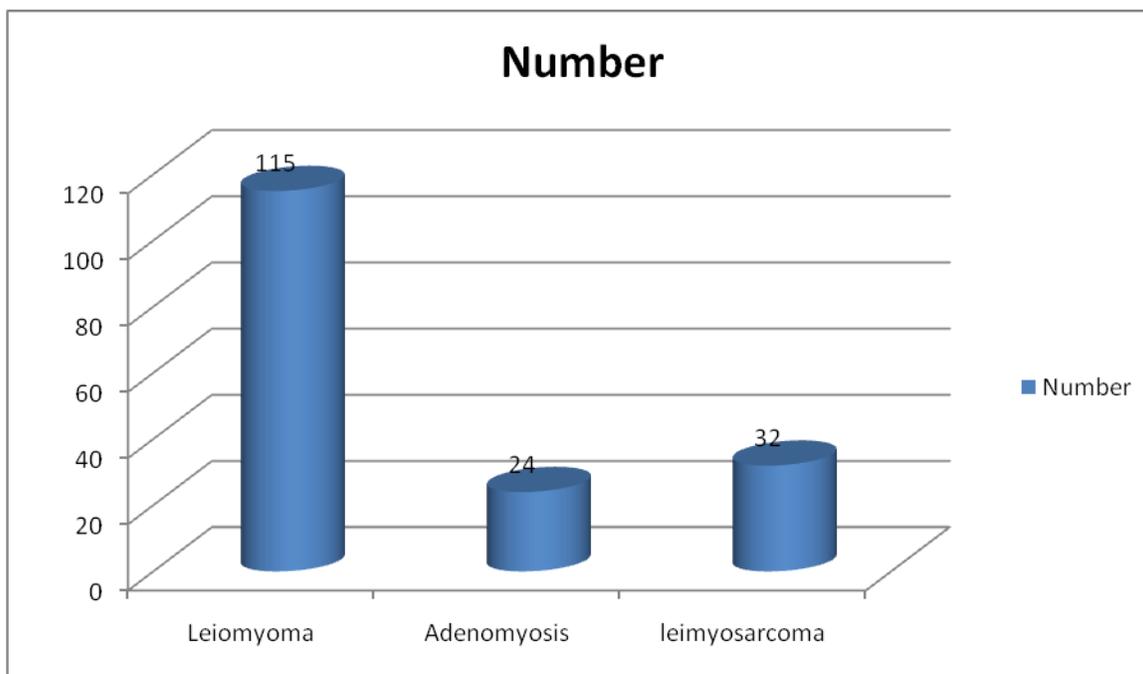
Table I shows that age group 20-30 years comprised of 102 lesions, 30-40 years had 132, 40-50 years had 170, 50-60 years had 70 and >60 years had 44 lesions. The difference was significant (P< 0.05).

Table II Histopathological lesions of endometrium

Lesions	Number	P value
Endometrial atrophy	65	0.05
Simple hyperplasia	70	
Chronic endometritis	32	
Endometrial polyp	38	
Normal	105	
Total	310	

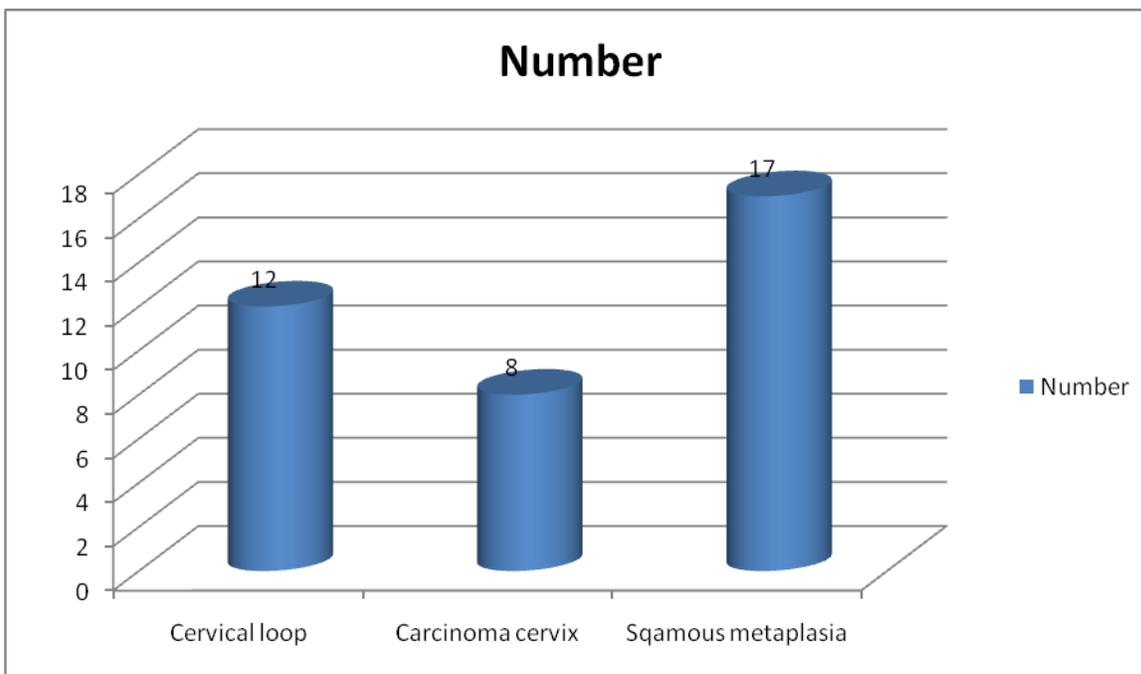
Table I shows that there was endometrial atrophy in 65, simple hyperplasia in 70, chronic endometritis in 32, endometrial polyp in 38 and normal findings in 105 cases. The difference was significant (P< 0.05).

Graph I Histopathological lesions of Myometrium



Graph I shows that lesions of myometrium included leiomyoma in 115, adenomyosis in 24 and leiomyosarcoma in 32 cases.

Graph II Histopathological lesions of Cervix



Graph II shows that cervix lesions were cervical loop in 12, carcinoma cervix in 8 and squamous metaplasia in 17 cases.

DISCUSSION

Hysterectomy is one of the common surgeries performed in the gynecology department. It is done for various causes which includes lifesaving methods in case of rupture uterus during delivery to patient's satisfaction who has been suffering from abnormal uterine bleeding. Hysterectomy is also a procedure which gives permanent relief in many non-neoplastic conditions.⁵ The present study was conducted to analyze the histopathological examination of the hysterectomy specimens.

In present study, age group 20-30 years comprised of 102 lesions, 30-40 years had 132, 40-50 years had 170, 50-60 years had 70 and >60 years had 44 lesions. Saravanan et al⁶ found that Common type of hysterectomy cases seen were that of abdominal hysterectomy. Peak age of hysterectomy was seen in age group 41-50 years. Leiomyoma was the most common histopathological lesion seen. Chronic non specific cervicitis was commonest lesion seen in cervix. Menorrhagia was the most common presenting complains.

We observed that there was endometrial atrophy in 65, simple hyperplasia in 70, chronic endometritis in 32, endometrial polyp in 38 and normal findings in 105 cases. Ranabhat et al⁷ found that 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) and endometrioid adenocarcinoma was seen in 1.14% (3 cases).

We found that lesions of myometrium included leiomyoma in 115, adenomyosis in 24 and leiomyosarcoma in 32 cases. Cervix lesions were cervical loop in 12, carcinoma cervix in 8 and squamous metaplasia in 17 cases. Rather et al⁸ found that the common histopathological findings were: chronic cervicitis (87.80%), leiomyoma (17.07%), uterine prolapse (16.72%), adenomyosis (3.96), non-specific endometritis (3.35%), squamous cell carcinoma of cervix (2.44%), endometrial polyp (2.44%), serous cystadenoma of ovary (2.44%) and endometrial hyperplasia (1.83%). Some of the specimens show more than one lesions in the body of uterus, of which coexistence of adenomyosis and leiomyoma was the most common. Neoplastic lesions in cervix were 4.27%, in body 16.92% and in ovaries 5.06%. Malignant neoplasms were found in cervix 71.43%, in uterine corpus 3.03% and in ovaries 25%. Ovaries of both sides were removed in 48.17% of total cases. Their median age was 45 years, lowest age 23 years and maximum age was 82. The rate of removal of both ovaries was found to be increasing with the increase of age. Only one case was found to be subtotal hysterectomy and others were total hysterectomy.

Rizvi et al⁹ found that 95 cases (62.5%) were done by the abdominal route and 57 (37.5%) were done by vaginal route. Uterovaginal prolapse (37.5%) was the most common preoperative indication, while the fibroid uterus (25.65%) was the commonest indication for the abdominal hysterectomy. Other common indications were dysfunctional uterine bleeding (DUB, 9.87%) and ovarian mass (7.89%). Fibroid uterus in the myometrium, chronic

cervicitis in the cervix and functional cysts in the ovaries were the commonest histopathology noted. Adenomyosis was the most missed pathology preoperatively.

CONCLUSION

Authors found that most common histological finding was leiomyoma and age group 40-50 years revealed more lesions.

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