THESIS ABSTRACT

TITLE: “HISTOPATHOLOGICAL ANALYSIS OF ENDOMETRIAL CHANGES IN ASSOCIATION WITH MYOMETRIAL LESIONS OF Hysterectomy Specimens”.

Dr. R. Rathika, GUIDE: Dr. K. Ambedkar Raj

INTRODUCTION

Uterus is a vital female reproductive organ. Tumors of uterus may arise from endometrium or myometrium. They may be benign or malignant. Leiomyoma is the most common benign myometrial tumor of smooth muscle origin. It is commonly called as fibroid. It is the most common neoplasm in women. These tumors develop during active reproductive period of life, increases during pregnancy and regress after menopause possibly showing estrogen dependency. The most common finding associated with leiomyoma is the Adenomyosis. It is characterised by the presence of islands of endometrial stroma and glands embedded in the myometrium. Other myometrial lesions like leiomyosarcoma, adenomyoma and carcinosarcoma are not uncommon. The endometrium is the inner layer of uterus which undergoes various changes during different phases of menstruation. Due to the unopposed estrogen stimulation, the endometrium undergoes spectrum of morphological changes ranging from hyperplasia to carcinoma.
AIMS AND OBJECTIVES

1. To study the changes of endometrium in association with myometrial lesions of hysterectomy specimens with respect to various clinical and morphological features.

2. To analyse the histopathological changes of endometrium in association with myometrial lesions of hysterectomy specimens in our institution with respect to LMP, age.

3. To assess the age distribution of the myometrial lesions in patients subjected to hysterectomy.

4. To assess the endometrial changes in relation with the types and sites of myometrial lesions in hysterectomy specimens.

SOURCE AND DATA FOR MATERIALS AND METHODS

The present study was conducted in the Department of Pathology, Trichy SRM medical college hospital and research centre, Irungalur.

DURATION OF STUDY

2016 – 2018, a two year prospective and retrospective study

SAMPLE SIZE

250 cases

INCLUSION CRITERIA

Patients undergoing hysterectomy for myometrial lesions presenting with clinical symptoms.
EXCLUSION CRITERIA

Specimens of endometrial curettage and aspiration.

Patients for whom hysterectomy is performed for non-myometrial lesions.

MATERIALS AND METHOD

The endometrium will be studied for the patients who underwent hysterectomy for clinical symptoms of myometrial lesions. A total of 250 hysterectomy specimens with myometrial lesions are taken. A detailed gross examination was performed with respect to location and size of leiomyoma, and status of endometrium and endometrial polyp if any was noted. Tissue bits from representative areas of the leiomyoma and endometrium were taken for histopathological examination, processed and paraffin blocks were made. Sections were cut at 5-micron thickness and stained with hematoxylin and eosin. Microscopic sections were studied and following histologic features were recorded:

**Endometrial parameters** - endometrium, phase, appearance of glands and stromal changes.

**Myometrial parameters**- presence or absence of adenomyosis, type or variant of leiomyoma.

RESULTS

The incidence of leiomyoma was 26.31%. Most of leiomyoma were seen in premenopausal women, of age group between 30 to 49 years with an incidence of 84%. Only 16% of were seen in postmenopausal age group. This study showed a higher incidence of unicentric fibroid with an incidence of 69.2%. Most of the fibroids were present in intramural location with an incidence 52.8% followed by submucous
fibroid with an incidence of 14.4%. The endometrium was thinned out (0.1 to 0.2 cm) in all the submucous fibroids (36 cases) intramural fibroids and 20 cases of postmenopausal women. 20.8% showed proliferative phase and 9.6% showed atrophic endometrium. 28 showed simple hyperplasia that is 11.2%. Complex hyperplasia was seen in 0.4%. Of 36 submucous leiomyomas, simple hyperplasia was seen in 11.1%. Proliferative phase was seen in 27.8%. Atrophic endometrium was seen in 13.9%. In this study, 97 cases had LMP of 16 to 30 days and 59 had more than 30 days of LMP. 20 cases showed persistent proliferative phase with LMP more than 15 days. 21 cases showed endometrial hyperplasia with LMP of more than 15 days. Most of the cases were between 40 to 49 years. In this age group, simple hyperplasia seen in 10.6%. 22.9% showed proliferative phase. 19.4% showed late secretory phase. Above 50 years age group 40 cases were reported. Of these 19 showed atrophic endometrium. Adenomyosis was with 106 cases with an incidence of 42.4%. Out of 106 cases of adenomyosis, 26 cases showed myohyperplasia. Malignant myometrial lesions were not obtained during the period of this study.

CONCLUSION

In this study, most of the myometrial lesions (leiomyoma) were seen in the 4th and 5th decades of life. Intramural location was seen more than other locations. The endometrial changes seen were thinning hyperplasia (simple as well as complex) and infrequently carcinomatous change. The older group of women in this study had atrophic endometrium and relative changes. Many of the cases had persistent hyperestrogenic stimulus. Adenomyosis and myohyperplasia were frequent associations.

KEY WORDS: Uterus, myometrial lesions, endometrial changes, adenomyosis,
REFERENCE


3. A Clinico pathological study of the relationship between adenomyosis and other hormone dependent uterine lesion.