

# A CLINICOPATHOLOGICAL STUDY OF ADENOMYOSIS UTERI (106 CASES)

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## Introduction

Adenomyosis is a varying degree of benign invasion of myometrium by endometrium. Women with adenomyosis characteristically being parous 4th or 5th decade patients as contrasted to the involuntarily sterile young women afflicted by endometriosis. Adenomyosis is not so uncommon in our country as indicated by the paucity of the published reports (Hilda, 1950; Bhatt, 1960; Mathur *et al.*, 1962; Rosario, 1968; Pendse, 1975, 1981 and Kasturilal and Gupta 1981).

In spite of many publications regarding adenomyosis, there is still widespread disagreement as to its incidence, etiology and associated pathology.

## Material and Methods

The present article is a retrospective study of patients in whom hysterectomy (abdominal or vaginal) had been done for various conditions in the department of obstetrics and gynaecology, S.P. Medical College, Bikaner from January, 1977 to March, 1981 (four years and three

months) and is based on clinicopathological aspect of 106 cases of adenomyosis uteri. Presence of endometrial glands/stroma in the myometrium at least one low power field away from endometrial lining was considered diagnostic of adenomyosis. Age of patients, parity, symptomatology, treatment and associated pathology were taken into consideration.

## Observations and Discussion

During the 4½ year period of study, 834 hysterectomies were performed for various gynaecological disorders and adenomyosis was found in 106 uteri removed (an incidence of 12.7%). The incidence of adenomyosis is generally considered to be 6-40% of all hysterectomies. The wide variations in the reported literature do not allow any conclusions regarding the influence of any factor on incidence. The incidence observed by us approximates to the observations of Kasturi *et al* (1981) and Pendse (1981).

The peak incidence (66.16%) was observed in 5th decade (41-50 years) viz. in late reproductive life and early menopausal years. The youngest patient was 22 years old and oldest was 64 years' age with a mean age of 44.8 years. One hundred and five out of 106 patients were parous and 1 was nulliparous. The pati-

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ents were mostly of 4th (25 cases) and 5th (33 cases) parity. These observations support the concept that child bearing plays a role in the aetiology of adenomyosis, but the disease takes nearly a decade or so after the last child birth to manifest itself.

Classical manifestations of adenomyosis are abnormal uterine bleeding and increase in the size of uterus. Menorrhagia was the commonest symptom seen in present series (50 cases, 47.31%). Twelve cases (11.24%) were asymptomatic (Table I). Similar symptoms have been

TABLE I  
Symptoms

Symptom	No. of cases	Percentage
Asymptomatic	12	11.24
Menorrhagia	50	47.31
Metrorrhagia	20	18.86
Scanty menstruation	6	5.64
Whitish discharge	2	1.88
Menopause	6	5.64
Postmenopausal bleeding	10	9.43
Total	106	100.00

preoperative diagnosis in any of these cases (Table II). Most of the cases observed by Kasturi *et al* (1981) and Pendse (1981).

It is interesting to observe that adenomyosis was not recorded as a possible

TABLE II  
Showing preoperative diagnosis

Diagnosis	No. of cases	Percentage
F.U.B.	47	44.54
Fibroid uterus	26	24.44
Prolapse	26	24.44
Ovarian cyst	6	5.64
Sterility	1	0.94
Total	106	100.00

were diagnosed preoperatively as F.U.B. (47 cases, 44.54+), fibroid uterus (26 cases, 24.44%) and prolapse (26 cases, 24.44%). Preoperative diagnosis is often missed on account of two reasons. Firstly the symptoms and signs are not typical. Secondly, at times it is impossible to differentiate it from leiomyoma and F.U.B.

Many other uterine pathologies occur at the same age group as adenomyosis. Hence most of the conditions associated with adenomyosis may be just coincidental (Table III). In the present study, only 2 cases have been reported as endometriosis externa which is a histologically similar but clinically different entity. Although endometriosis externa in association with adenomyosis was present in only 1.88% cases in present series. comparatively higher incidence has been reported by other workers, viz. 56.6% by Benson and Sneed (1958), 12.2% by Israel and Wauterz (1959), 14.5% by Emge (1962), 15.5% by Green (1966), 14.2% by Molitor (1971) and 7.59% by Pendse (1981).

It is believed that adenomyosis is due to an endocrine dysfunction of the ovary which is manifested often histologically by the endometrium being the seat of well marked hyperplasia. Most of the workers (Novak and deLI MA, 1948; Benson and Sneed, 1958; and Emge, 1962) have pointed out the suggestive importance of associated endometrial hyperplasia which is frequently but not invariably found in conjunction with adenomyosis. Hunter *et al* (1947) reported that there was no association. Very low incidence of hyperplasia (4.70%) in our series would tend to disagree with the theory of hyperoestrinism in etiology of adenomyosis.

Unless and until a method of preoperative diagnosis is evolved it is impossible

TABLE III  
Showing Associated Pathology

Associated pathology	No. of cases	Percentage
Chronic nonspecific cervicitis	66	62.26
Leiomyoma	19	17.92
Squamous metaplasia (cervix)	5	4.70
Prolapse	7	6.58
Cystic hyperplasia	5	4.70
Endometriosis	2	1.88
Fibroma ovary	1	0.94
Follicular cyst	26	24.44
Serous cyst	4	3.76
Chocolate cyst	2	1.88
Krukenberg's tumour	1	0.94
Monckberg's degeneration	2	1.88
Salpingitis	5	4.70
Luteal cyst	3	2.82

to comment on treatment and relief with hormonal therapy as reported by many authors. To achieve cure more important is the checking of the process, which probably starts long before the patient reports. Repeated pregnancies and deliveries seem to play a role in this.

#### Summary

A retrospective study of 106 cases of adenomyosis during 4½ year period was done. Adenomyosis was found in 12.7% of hysterectomy specimens obtained from patients with different gynaecological conditions; mean age was 44.8 years and peak incidence (66.16%) was in 41-50 year age group. Menorrhagia was the commonest symptom (50 cases 47.3%). Coexisting gynaecological conditions were mainly chronic cervicitis, leiomyoma and follicular cysts. Coexisting endometriosis externa was found only in 2 cases (1.88%).

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