

## UTERINE ADENOMYOSIS

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### SUMMARY

An analysis of 384 consecutive hysterectomies done for various indications is presented. The study was carried out at the N. Wadia Maternity Hospital over a period of one year extending from April 1990 to March 1991.

The specimens were examined for histopathological evidence of adenomyosis. These cases were correlated to preoperative findings & investigations. Adenomyosis was seen histologically in 19% of cases. The commonest presenting symptoms in these patients were polymenorrhoea (41%) and dysmenorrhoea (37%). A pre-operative clinical diagnosis was made only in 19% of cases. However associated histopathological abnormalities were present in 79% of cases.

Hence adenomyosis should be thought of more commonly in patients presenting with abnormal uterine bleeding.

### INTRODUCTION

Adenomyosis is a benign condition characterised by invasion of the myometrium by endometrial glands. Although it may be asymptomatic, it usually presents with abnormal uterine bleeding and dysmenorrhoea. A pre operative diagnosis is often difficult and ultrasonography does not give conclusive

results. The most common misdiagnosis of this condition is that of a leiomyomatous uterus. The aim of the present study is to evaluate the incidence of this condition & to co-relate it with pre-operative findings and investigations.

### MATERIALS AND METHODS

Case Sheets of 384 consecutive hysterectomies, both vaginal and abdominal for various indications alongwith one case of adenomyomectomy were carefully

evaluated. The specimens were scrutinised microscopically for evidence of adenomyosis. The clinical feature of these cases were recorded, and the pre-operative investigations leading to the diagnosis were also noted. The occurrence of co-existing pathological features were scrutinised. The criteria of presence of endometrial tissue below the basement membrane in at least two low power fields as proposed by Benson & Sneed was used.

**RESULTS**

Out of the 384 hysterectomy specimens, adenomyosis could be seen histologically in 73 (19%) cases. In 59 cases associated additional histopathologically detected abnormalities could be noted.

The ages ranged from 28 years to 58 years with a mean of 37.3 years.

**Parity :** Parity ranged from 0 to 5. Contrary to popular belief nulliparous women do not seem to be immune from this condition.

65 cases (89%) had borne at least one child in the present series

**Type of hysterectomy :** Out of 73 total cases, 33 (45.2%) were performed by vaginal route and 40 (54.8%) by the abdominal route.

**Signs and Symptoms**

Table I shows the details of presenting features.

The most common presenting symptom was polymenorrhagia, seen in more than half (56.2%) of the patients. Dysmenorrhoea was the next common symptom. The only case presenting with infertility was one, where adenomyomectomy

**Table I**  
**Symptoms of Patients with Adenomyosis**

Symptom	No.	%
Polymenorrhagia	41	56.2
Dysmenorrhoea	37	50.7
Menorrhagia	15	20.5
Mass in abdomen	16	21.9
Metrorrhagia	6	8.2
Infertility	1	1.4

\* Some patients had more than one symptom.

was carried out.

**Associated histopathological abnormalities**

Table II shows the associated abnormalities. There were seen in 58 (79.5%) cases. The most common was the presence of a leiomyoma, and was seen in more than half the cases. Endometrial polyp and endometriosis were the other common associated abnormalities.

**Table II**  
**Associated Histopathology**

Disease	No.	%
Leiomyoma	38	52.1
Endometrial Polyp	9	12.3
Endometriosis	7	9.6
Ovarian Tumour	3	4.1
Endometrial hyperplasia	4	5.5

\* Some cases had more than one abnormality.

Table III

## Preoperative Diagnosis

Diagnostic Modality	Correct	Missed	Total
Preoperative Clinical diagnosis	14 (19.2%)	59 (80.8%)	73
Preoperative Ultrasound diagnosis	2 (5.9%)	32 (94.1%)	34

Table IV

## Associated Pathology

Author	Year	Leiomyoma	Endometrial pdyp	Endometriosis
Hunter	1947	58.8	-	3.6
Benson	1958	56.6	8.0	13.3
Mathur	1962	19.0	4.8	-
Bird	1972	53.2	3.2	6.3
Malik	1992	38.5	14.9	-
Present Series	1993	52.1	12.3	9.6

**Preoperative diagnosis**

Clinical and ultrasonography examinations were used for evaluation of cases. The diagnosis of this condition can be very difficult. Table III gives the details of preoperative diagnosis. While clinical examination was performed in all cases, Ultrasonography was used in only 34 cases. The most common ultrasonographic misdiagnosis was leiomyoma.

**DISCUSSION**

In the present series, adenomyosis was found in 19% of hysterectomy specimens. The precise incidence of this entity in surgical specimens is unknown. Dreyfuss (1940) reported an incidence of 8.1%.

Mathur et al (1962) reported it as 39.1% in a series of 741 consecutive hysterectomies, whereas Bird et al (1972) quote an incidence as high as 61.5%. This increased incidence was found where multiple tissue blocks from the specimen were examined apart from taking routine samples.

Polymenorrhagia and menorrhagia together account for 56 (76.7%) cases making it the most common form of presentation. This was 51.2% in Bird et al's series (1972) and 77% in the series of Hunter et al (1947). Our incidence of metrorrhagia (8.2%) matches well with that of Bird et al (10.9%).

Leiomyoma was the most commonly

found associated pathology. Associated abnormalities as reported by other authors can be seen in Table IV.

Though adenomyosis and endometriosis are generally thought not to coexist, they can be seen together in 3.6 to 13.3% of cases.

Preoperative diagnosis of adenomyosis seems to be very elusive. Preoperative clinical diagnosis was possible in 19.2% of cases. Owolabi & Strickler (1976) could make a preoperative diagnosis in only 10% cases, whereas Malik et al (1992) could achieve the same in 4.5% of cases. Ultrasonography is a boon for gynaecological diagnosis, but lack of discrete criteria for diagnosis of adenomyosis make it a poor tool for preoperative diagnosis of this condition. It is important that a misdiagnosis of leiomyoma be not made as patients with infertility may be wrongly put up for myomectomy, only to recognise the presence of adenomyosis after incising the uterus, as it happened in one of our cases.

Adenomyosis should be thought of more commonly in middle aged women presenting with menstrual abnormalities

with or without dysmenorrhoea.

Emphasis must be placed on clinical examination rather than ultrasonography. The condition should be suspected especially if the symptoms are resistant to conservative therapy. Adenomyosis, very often, is the only diagnosis seen on histopathological examination of the uterus where abnormal bleeding and pain has prompted a hysterectomy.

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#### REFERENCES

1. Benson RC, Sneed VD : *Am. J. Obstet. & Gynec.* : 76;1044;1958.
2. Bird C.C., Mc Elin TW; Manalo - Estrella P. : *Em. J. Obstet. & Gynec.* : 112;583;1972.
3. Dreyfuss M.L. : *Am. J. Obstet. & Gynec.* : 39;95;1940.
4. Hunter W.C., Smith L.L. & Romer W.C. : *Am. J. Obstet. & Gynec.* : 53;663;1947.
5. Malik S., Sharma J.B., Gulati N. & Jain K. : *J. Obstet. & Gynec. India* : 42;234;1992.
6. Mathur B.B.L., Shah B.S. & Bhende Y.M. : *Am. J. Obstet. & Gynec.* : 84;1820;1962.
7. Owolabi J.O., Strickler R.C. : *Obstet. & Gynec.* : 50;424;1976.