International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Patel H et al. Int J Reprod Contracept Obstet Gynecol. 2023 Apr;12(4):980-983
www.ijrcog.org
pISSN 2320-1770 | eISSN 2320-1789

DOI: https://dx.doi.org/10.18203/2320-1770.ijrcog20230798

Original Research Article

Retrograde study of patients with adenomyosis at tertiary health centre, a spectrum from clinical presentation to its final diagnosis and treatment

Hemali Patel[1], Kishankumar Kanani[1]*, Ronak Bhankhar[1], Priya Dhameliya[2]

[1]Department of Obstetrics and Gynecology, GMERS Medical College and Hospital, Junagadh, Gujarat, India
[2]Department of Obstetrics and Gynecology, SMIMER College, Surat, Gujarat, India

Received: 26 January 2023
Revised: 13 March 2023
Accepted: 14 March 2023

***Correspondence:**
Dr. Kishankumar Kanani,
E-mail: kishankanani16@gmail.com

ABSTRACT

Background: Adenomyosis is a disease where ectopic endometrial glands affect the muscular wall of the uterus. It is considered a specific entity in the PALM-COEIN FIGO (polyp; adenomyosis; leiomyoma; malignancy and hyperplasia; coagulopathy; ovulatory dysfunction; endometrial; iatrogenic; and not yet classified- International Federation of Gynaecology and Obstetrics). Aims and objectives were to diagnose adenomyosis accurately with help of data of clinical findings and imaging modalities.
Methods: It was a retrospective study done at tertiary hospital, Junagadh from June 2022 to November 2022. The HPE reports and case records of all the hysterectomy specimen were reviewed. Data regarding age, parity, symptoms, obstetric history, examinations, co-morbidities, investigation findings and treatment modalities were noted. They were tabulated and analysed.
Results: Out of the 50 patients, 30 patients (60%) were in the age group of 41-50 years. The prevalence of adenomyosis in our study was only 6% in post-menopausal women when compared to the age group 41-50 years (60%). Multiparous women had 92% incidence of adenomyosis. 62% had menstrual disturbances. Dysmenorrhea and dyspareunia were the next common symptoms. Fibroid was the commonest associated pathology 44%. 32% had endometrial hyperplasia, whereas 68% had no pathology. Imaging picked up only 36% of cases contrary to 28% of clinical diagnosis and was raised to 64% with gross examination of specimen and 100% with HPE.
Conclusions: Better modality to diagnose adenomyosis is clinical presentation. USG failed to diagnose all the cases. Gold standard modality is histopathological examination.

Keywords: Adenomyosis, Hysterectomy, Magnetic resonance imaging, Transvaginal scan

INTRODUCTION

Adenomyosis is defined as the presence of endometrial stroma and glands within the myometrium, at least one low power field from the basis of the endometrium. This condition may be completely asymptomatic or may cause menorrhagia and progressive dysmenorrhoea. It is found between 35-50 years of age group.[1]

Symptoms

Typically associated with adenomyosis include excessively heavy or prolonged menstrual bleeding, dyspareunia and dysmenorrhoea. Symptoms often begin up to 2 weeks before the onset of a menstrual flow and may not resolve until after cessation of menses. Patients may present with chronic pelvic pain.[1]

Sign

The uterus is typically diffusely enlarged, although usually less than 14 cm in size and is often soft and tender particularly at the time of menses. Mobility of the uterus is not restricted, and there is no associated adnexal pathology.[2]

Diagnosis

Adenomyosis is a clinical diagnosis. Definitive diagnosis can only be made histologically. Imaging studies including pelvic ultrasound or MRI, although helpful, are not definitive. Because of the cost of MRI and negligible improvement in diagnostic accuracy, this study is not recommended routinely. Transvaginal ultrasound has been shown to have an accuracy rate of 68% to 86% in diagnosing adenomyosis.[1]

Aims and objectives

To analyse clinical presentation of patients with adenomyosis to its final diagnosis and treatment. To determine accuracy of clinical examination and imaging modalities in the diagnosis.

METHODS

It was a retrospective study done at GMERS Medical College and Hospital, Junagadh during June 2022 to November 2022.

The gross and microscopic pathology reports were reviewed in detail and the associated pathology tabulated. The clinical histories were reviewed for preoperative diagnosis, symptomatology and prior surgery.

Microsoft Excel was used to analyse the data.

From 30 years to postmenopausal age group are included in this study. The records of consecutive patients who had undergone hysterectomy were analysed. Specimens with malignancies were excluded from study group.

RESULTS

Majority of patients were in 40-50 years of age. 13 cases were in the age group of 30-40 years. 3 patients were postmenopausal. 4 patients were more than 50 years of age group.

Table 1: Age distribution.

Age	Cases (N=50)
<30	Nil
30-40	13 (26%)
41-50	30 (60%)
>50	4 (8%)
Postmenopausal	3 (6%)

92% were multigravida while 6% were nulligravida. The least incidence was in nullipara with 2% case.

Table 2: Parity.

Parity	Cases (N=50)
Multiparous	46 (92%)
Nulligravida	3 (6%)
Nulliparous	1 (2%)

Table 3: Presenting symptoms.

Symptoms	Cases
Menstrual disturbances	
Heavy menstrual bleeding	8 (16%)
Increased frequency of cycle	12 (24%)
Intermenstrual bleeding	2 (4%)
Continuous bleeding PV	6 (12%)
Decreased frequency with menorrhagia	2 (12%)
Postmenopausal bleeding	1 (2%)
Spotting PV	1 (2%)
Pain	
Congestive dysmenorrhoea	2 (4%)
Spasmodic dysmenorrhoea	4 (8%)
Continuous pain	5 (10%)
Dyspareunia	2 (4%)

Among the menstrual complaints, increasing frequency of cycle was the most common followed by heavy menstrual bleeding. Continuous pain was another most common complaint which affects daily life style.

Table 4: Duration of symptoms.

Duration	Cases (N=50)
<3 months	14 (28%)
3-6 months	20 (40%)
1 month - 1 year	5 (10%)
1 year - 2 years	8 (16%)
>2 years	3 (6%)

14 patients had recent history of onset of symptoms from 3 months. Maximum patients had symptoms from one year. Very few of them had from 2 years.

Table 5: Ultrasound imaging.

USG findings	Cases (N=50)
Ut normal size	3 (6%)
Ut normal size with ovarian cyst	4 (8%)
Ut bulky	9 (18%)
Fibroid	11 (22%)
Fibroid + adenomyosis	3 (6%)
Adenomyosis	18 (36%)
Fibroid + ovarian cyst	1 (2%)
Fibroid + ovarian cyst + adenomyosis	1 (2%)

14% were reported as normal uterus. Adenomyosis was picked up in 44% of cases and in the rest adenomyosis was not reported.

Table 6: Specimen retrieval from surgery.

TAH	**19 (38%)**
TAH + BSO	25 (50%)
TAH + RSO	1 (2%)
TAH + LSO	2 (4%)
VH	2 (4%)
NDVH	1 (2%)

94% of the cases underwent abdominal hysterectomy. 2% underwent vaginal hysterectomy, 4% NDVH.

Table 7: Histopathological examination of specimens.

Endometrium		Myometrium	
Secretory	12 (24%)	Adenomyosis + fibroid + ovarian cyst	4 (8%)
		Adenomyosis + fibroid	16 (32%)
Proliferative	22 (44%)	Adenomyosis + fibroid + polyp	2 (4%)
		Adenomyosis	24 (48%)
Hyperplastic	16 (32%)	Adenomyosis + ovarian cyst	2 (4%)
		Adenomyosis + polyp	2 (4%)

Proliferative type of endometrium was found most common in histopathology followed by hyperplastic type. Main role of pathophysiology of adenomyosis is oestrogen. 24 patients were found to have only adenomyosis. Fibroid, polyp and ovarian cyst like pathology were associated with adenomyosis in majority patients.

Table 8: Diagnosis of adenomyosis.

Clinically	**14 (28%)**
USG	18 (36%)
Gross	32 (64%)
HPE	50 (100%)

Histopathological examination is most reliable method for diagnosis of adenomyosis. Least sensitive is clinical diagnosis.

DISCUSSION

30 patients (60%) out of the 50 patients were in the age group of 41-50 years, which is the usual age of occurrence as similarly found in Bird et al study.[3] The prevalence of adenomyosis in post-menopausal women was only 6% as compared to the age group 41-50 years (60%) in our study. This indicates adenomyosis regresses after menopause but remains detectable. Kitawaki et al, conducted a similar study showing diagnosis of adenomyosis in postmenopausal women.[4] In our study, multiparous women had 92% incidence of adenomyosis in correlation with high incidence in Wallwiener et al study.[5] 62% had menstrual disturbances which were also seen in Vercellin e al study.[6] Dysmenorrhea and dyspareunia were the next common symptoms. Fibroid was the commonest associated pathology (44%). Vercillin et al study also had the same pathology as commonest.[5] 32% had hyperplasia of endometrium whereas 68% had no pathology. Similar results were seen in Cullen et al, study showing that no hyperplasia was present as there was absence of prolonged oestrogen exposure.[7]

36% of cases were diagnosed by help of USG in contrary to 28% of clinical diagnosis and was raised to 64% with gross examination of specimen and 100% with HPE. Aziz et al study found similar outcome in his study.[8]

Major limitations of these studies included their retrospective design which precluded an objective measurement of severity.

CONCLUSION

Adenomyosis has a varied presentation. All cases cannot be diagnosed by ultrasonography. Clinical examination is a better modality. Associated pathology may mask the clinical features of adenomyosis, and diagnosis may be missed. Gold standard method for diagnosis of adenomyosis is histopathological examination.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Berek JS, Berek DL. Pelvic Pain and Dysmenorrhea. In: Berek and Novak's Gynecology. 16th edn. Wolters Kluver; 2019:293.
2. Levgur M. Diagnosis of adenomyosis: a review. J Reprod Med. 2007;52(3):177-93.
3. Bird CC, McElin TW, Manalo-Estrella P. The elusive adenomyosis of the uterus- revisited. Am J Obstet Gynecol. 1972;112(5):583-93.
4. Kitawai J. adenomyosis: the pathology of an oestrogen dependent disease. Best Pract Res Clin Obstet Gynaecol. 2006;20:493-502.
5. Taran FA, Wallwiener M, Kabashi D, Rothmund R, Rall K, Kraemer B, et al. Clinical characteristics indicating adenomyosis at the time of hysterectomy: a retrospective study in 291 patients. Arch Gynecol Obstet. 2012;285(6):1571-6.
6. Vercellin P, Vigano P. adenomyosis: epidemiological factors. Best Pract Res Clin Obstet Gynaecol. 2006;20:465-77.

7. Cullen TS. The distribution of adenomyomata containing uterine mucosa. Arch Surg. 1920;1(2):215-83.
8. Azziz R. Adenomyosis: Current perspectives. Obstet Gynecol Clin North Am. 1989;16:221-35.

Cite this article as: Patel H, Kanani K, Bhankhar R, Dhameliya P. Retrograde study of patients with adenomyosis at tertiary health centre, a spectrum from clinical presentation to its final diagnosis and treatment. Int J Reprod Contracept Obstet Gynecol 2023;12:980-3.