ADENOMYOSIS; DIAGNOSED BY TRANSVAGINAL ULTRASONOGRAPHY: A CASE REPORT

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M.Kır, M.D.** / F. Durmuşoğlu, M.D.** / M. Erenus, M.D.****
R. Ahıskalı, M.D.* / S. Pekin, M.D.***

* *Professor, Department of Obstetrics and Gynecology, Faculty of Medicine, Marmara University, İstanbul, Turkey.*
** *Associate Professor, Department of Obstetrics and Gynecology, Faculty of Medicine, Marmara University, İstanbul, Turkey.*
*** *Assistant Professor, Department of Pathology, Faculty of Medicine, Marmara University, İstanbul, Turkey.*
**** *Resident, Department of Obstetrics and Gynecology, Faculty of Medicine, Marmara University, İstanbul, Turkey.*

SUMMARY

Diagnosis of diffuse adenomyosis by means of conventional techniques and pelvic examination is still unsatisfactory. Adenomyosis is quite a common disease that causes pelvic pain and menorrhagia in the premenapausal group of women. A thirty-nine years old female patient with severe pelvic pain and menorrhagia was examined by transvaginal ultrasonography. The findings of transvaginal ultrasonography, correlated with the pathology report is presented in this paper. Anechoic heterogenous areas in the myometrium have raised the question of adenomyosis. Pathological findings of the hysterectomy specimen were in accordance with the ultrasonography findings, which may lead to a new era in the diagnosis of adenomyosis.

Key Words: Adenomyosis, pelvic pain, transvaginal ultrasonography.

INTRODUCTION

Adenomyosis is characterized by the presence of endometrial glands and stroma in the myometrium (1). There are two types; diffuse and nodular. The frequency of adenomyosis reported in the literature varies between 5-70% (2). It is a very well known cause of menorrhagia and pelvic pain. At present there are no reliable methods to detect this condition, which is generally diagnosed by the pathologist. The cause of adenomyosis is unknown but it occurs infrequently in nulliparas. It is primarily a disorder of parous women over age thirty and associated with secondary dysmenorrhea. It is found in 20% of hysterectomy specimen. It causes symptoms in approximately 70% of proven cases; about 30% of cases are asymptomatic and discovered accidentally (3).

CASE REPORT

A thirty-nine year old female was admitted to Marmara University hospital, Obstetrics and Gynecology outpatient clinic with the complains of menorrhagia, dysmenorrhea and dysparenaue. On pelvic examination the uterus was in 8 weeks size, tender, boggy and mobile. There was no other abnormality regarding the adnexae and lower genital tract. Routine transvaginal ultrasonography prior to diagnostic curretage revealed anechoic areas with regular borders in the myometrium (Figs 1,2). Pathological evaluation of the curettage material was reported as cystic endometrial hyperplasia. She was prescribed cyclic medroxyprogesterone acetate for 3 months.

In the last month of the medical treatment, she was presented with intractable pelvic pain and menorrhagia. With these findings hysterectomy was planned with the consent of the patient. At laparotomy, the uterus was at 8 weeks gestational size, soft and hyperemic. There were multiple endometriomas ranging between 1-2 cm in both ovaries. Total abdominal hysterectomy with bilateral salpingoophorectomy was performed and she was discharged on the 6th day of operation with no postoperative complications. Pathological examination revealed, hypertrophic myometrium surrounding foci of endometriosis. These foci usually harbored cystically dilated endometrial glands with atrophic epithelium (Fig. 3)

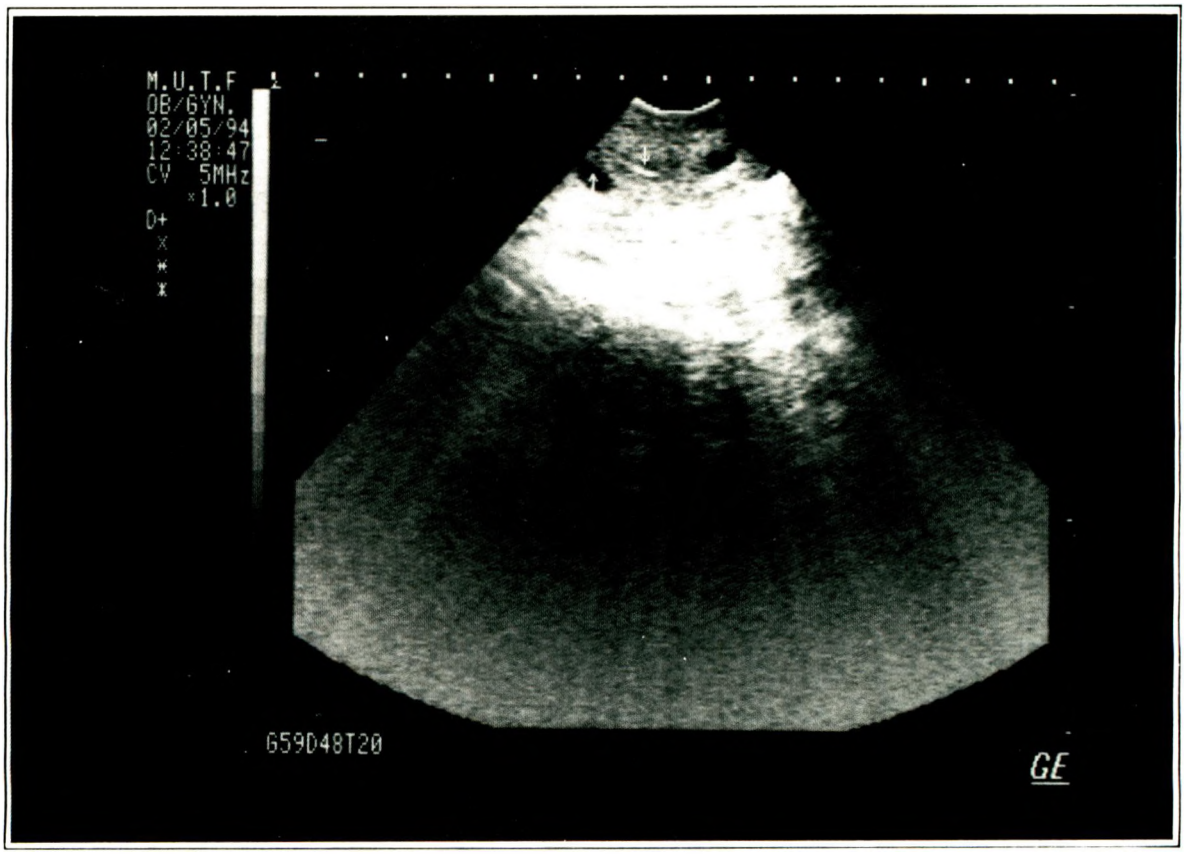

Fig 1. Anechoic cystic areas within the myometrium

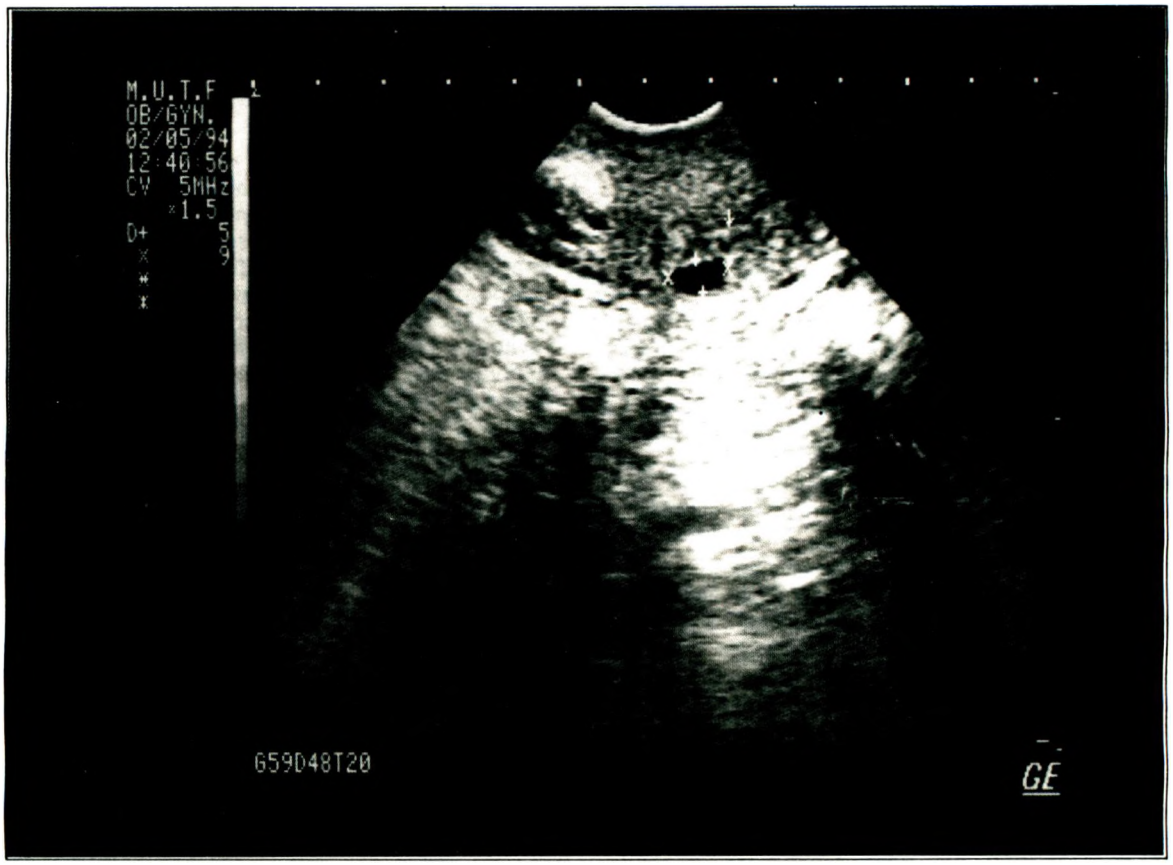

Fig 2. Anechoic cystic areas in relation to endometrium; largest one measuring 7x11 mm (arrows indicate endometrial lining)

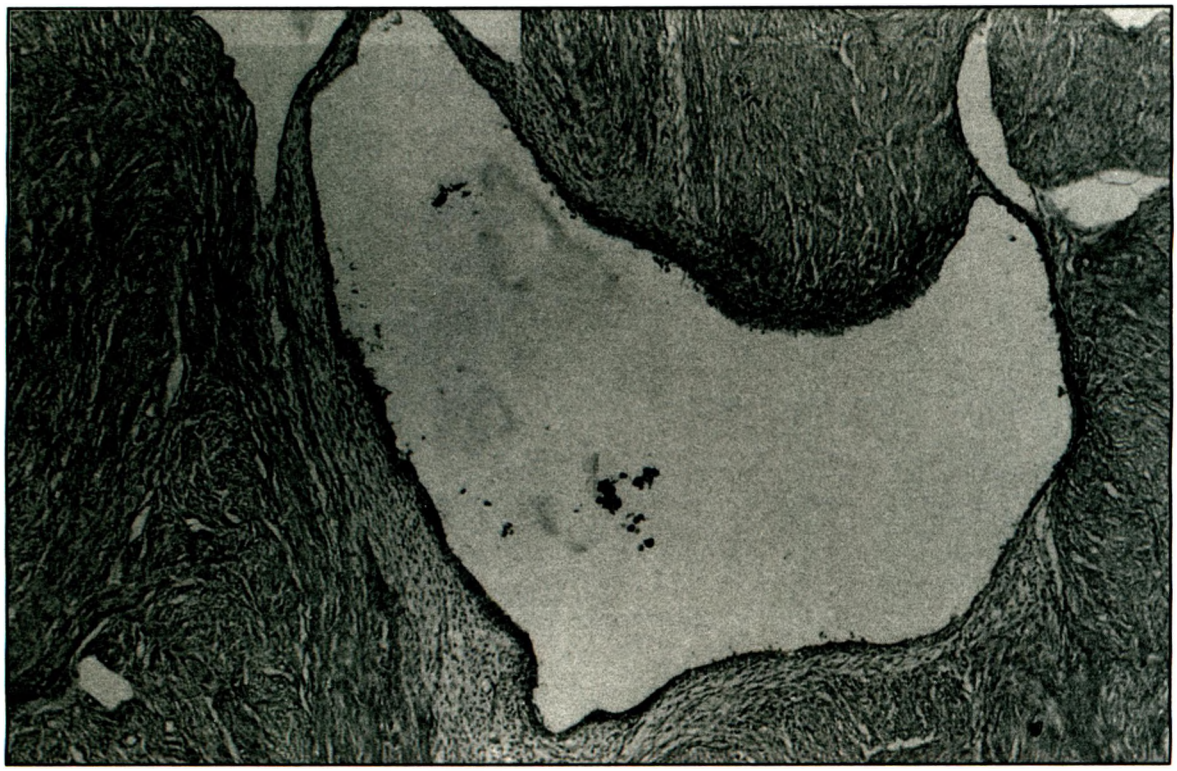

Fig 3. Foci of endometriosis containing a cystically dilated endometrial gland with atrophic epithelium (H&Ex80)

DISCUSSION

The diagnostic capability of ultrasonography strictly depends on cases selected on the basis of symptomatology and clincal examination as well as the high prevalence of the disease. The pathologist has to examine at least four blocks of uterine wall which are indicated by the sonographer. The cycle phase in which the ultrasonography is performed does not effect the result of the method. This is probably attributable to the fact that the glands and the stroma of adenomyosis are of basal type and poorly affected by the cyclic hormonal changes (4).

The presence of adenomyosis can only be suspected on the basis of the history and clinical examination (5). Many efforts have been made to find a reliable diagnostic method. Hysterosalpingography sometimes demonstrates multiple defects leading from the uterine cavity to the myometrial wall. However, these images of adenomyosis are not readily distinguishable from those produced by vascular or lymphatic extravasation (6). Hysterosalpingography is no longer used for the diagnosis of adenomyosis.

The diagnostic capability of abdominal ultrasonography has been evaluated in various studies. Walsh et al (7) described the honeycoomb image in four patients with histologically proven adenomyosis. Buli et al (8) did not detect adenomyosis by ultrasonography. Bohlman et al (9) rewieved the sonographies of seven women with histologically proven extensive adenomyosis and observed abnormal uterine images in six patients; enlarged uterus, increased thickness of the posterior wall and a slight increase in the uterine echogenicity. Mark et al (10) evaluated 21 premenapausal women who had strong clinical presentation of adenomyosis. Of 8 patients with the proven disease were correctly diagnosed by MR imaging.

In conclusion, our case report demonstrates that the use of transvaginal ultrasonography for the diagnosis of diffuse adenomyosis represents an additional diagnostic tool in the preoperative diagnosis of the adenomyosis. In fact, although its diagnostic value is not as high as MR imaging, it is a rapid, noninvasive and costeffective method.

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