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Case Report

Obstetrics and Gynaecology Section

A Huge Mature Cystic Teratoma in a Nulliparous Patient

ISIL UZUN[1], MELIH GUNDUZ[2], OZLEM PATA[3], CIHAT UNLU[4]

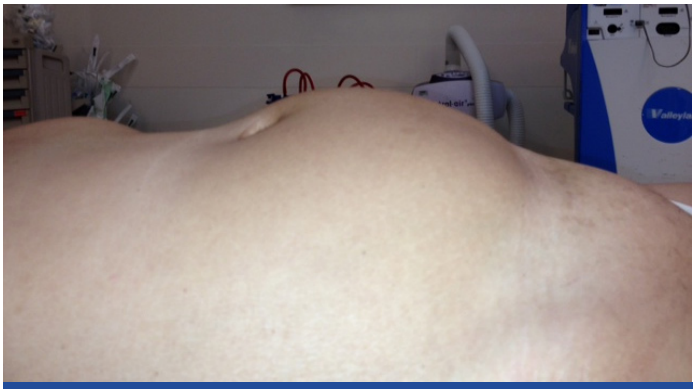
ABSTRACT

Here we report a case of a giant mature cystic teratoma of the ovary in a 38-year-old nullipaous woman. The patient presented with abdominal distension and abdominal pain. Laparotomy and cystectomy yielded satisfactory results. Histologic evaluation confirmed a benign cystic teratoma of the ovary. The patient underwent surgery for rupture of corpus luteum six years ago and no gross lesion was seen at the operation. This case demonstrates that dermoid cysts can grow to enormous sizes within a short duration.

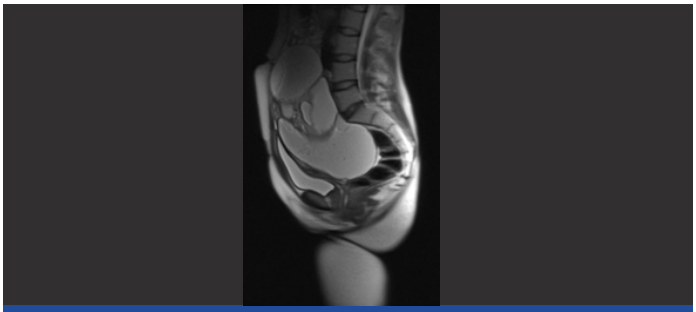
Keywords: Laparotomy, Huge mature teratoma, Magnetic resonance

CASE REPORT

A 38-year-old nulliparous woman was admitted with a chief complaint of abdominal pain and progressive abdominal distension, of 12 months duration [Table/Fig-1]. Medical history of the patient was uneventful. She had an ovarian surgey for ruptured corpus luteum cyst six years ago. Cystectomy was performed and the pathologic examination of the cyst was asssociated with corpus hemorrhagicum. No gross ovarian lesion was found during the surgery. Her physical condition was good. She was not pale, febrile or jaundiced. There was no peripheral oedema or lymphadenopathy and her vital signs were within normal range.



[Table/Fig-1]: Abdominal distension



[Table/Fig-2]: MRI: Sagittal view

Abdominopelvic MRI showed a huge, complex abdominal mass filling the pelvis completely and displacing other abdominal organs [Table/Fig-2]. The right kidney demostrated marked hydronephrotic changes. Fatty tissue, calcification and keratinoid material was identified.

A diagnosis of ovarian tumour was made. She subsequently had a laparotomy. At laparotomy the tumour was 28x25x30 cm in diameter [Table/Fig-3,4]. Ovarian cystectomy was performed with ovarian preservation. The other ovary, fallopian tube and the uterus were normal. There was no ascites and the other abdominal organs were normal. Histological investigation of the tumour revealed mature cystic teratoma of the ovary with no foci of malignant change. She was discharged on the 2nd day of the operation. Her follow-up examinations were uneventful.

[Table/Fig-3]: Ovarian tumour excised **[Table/Fig-4]:** Mature Cystic teratoma

DISCUSSION

Mature cystic teratoma is the most common germ cell neoplasm and in some series the most cyommon ovarian neoplasm removed at the surgery [1,2]. Mature cystic teratomas arise from a single germ cell after the first meiotic division [3]. Mature cycstic teratomas are usually asymptomatic and grow slowly at an avarge rate of 1,8 mm each year. Abdominal pain and other nonspecific symptoms occur in the minority of patients [4,5]. They are usually asymptomatic and not larger than 10 cm in size in which ectodermal structures are predominant [6]. Dermoid cyst with enormous size is a very rare clinical entity [7,8].

In our case the tumour size was nearly 30 cm in diameter and she noticed progressive abdominal distention and abdominal pain for only 12 months but no fever or loss of appetite. She had an operation for ruptured corpus luteum cyst six years ago and no gross pathology at the ovaries were seen. Our case presented with rapid growth of the tumour.

Dermoid cysts are usuallly treated by resection with preservation of adjacent ovarian tissue as much as possible. If there is a clear limit between the tumour and the uninvolved ovarian tissue, the tumour

can be bluntly dissected off along an avascular plane. Despite the large size of the mass, our case was treated successfully by cystectomy with ovarian preservation. Ovarian cystectomy rather than oophorectomy is the preferred surgery esspecially for nulliparous women. Tumour size should not be accepted as an indication for oophorectomy.

CONCLUSION

It is important to bear in mind that dermoid cysts are common neoplasms of the ovary and could grow to enormous sizes without causing serious symptoms, more rapid than expected.

REFERENCES

[1] Koonings PP, Campbell K, Mishell Dr, Jr, Grimes DA. Relative frequency of primary ovarian neoplasms: a 10-year review. *Obstet Gynecol*. 1989;74:921-26.
[2] Whitecar MP, Turner S, Higby MK. Adnexal masses in pregnancy; a review pf 130 cases undergoing surgical managament. *Am J Obstst Gynecol*. 1999;181:19-24.
[3] Linder D, Mccaw BK, Hecht F. Pathogenic origin of benign ovarian teratomas. *N Engl J Med*. 1975;292:63-66.
[4] Comerci JT, Jr. Liccicardi F, Bergh PA, Geregori C, Breen JL. Mature cystic teratoma: a clinicopathologic evaluation of 517 cases and review of the literature. *Obst Gynecol*. 1994;84:22-28.
[5] Caspi B, Appelman Z, Rabinerson D, Zalel Y, Tulandi T, Shoham Z. The growth pattern of dermoid cysts : a prospective study in premenapausal and postmenopausal women. *Fertil Steril*. 1997;68:501-05.
[6] Felix NR. Neoplastic ovarian tumours In: mattling RF and Thomson, JD (eds) Te Linde's operative gynaecology. Philedelphia, USA: Lipincott Conpany (pub); 1985.
[7] Chong HM, Lee FY, Lo A, Li CM. A giant gas-filled abdominal mass in an elderly female: a case report. *World J Gastroenterol.* 2011;17(31):3659-62.
[8] Devoize L, Collangettes D, Le Bouëdec G, Mishellany F, Orliaguet T, Dallel R, et al. Giant mature ovarian cystic teratoma including more than 300 teeth. *Oral surg* 2008;105:76-79.

PARTICULARS OF CONTRIBUTORS:
1. Faculty, Department of Obstetrics and Gynecology, Acıbadem Bakirkoy Hostital, Bakırkoy/Istanbul.
2. Faculty, Department of Obstetrics and Gynecology, Acıbadem Bakirkoy Hostital, Bakırkoy/Istanbul.
3. Faculty, Department of Obstetrics and Gynecology, Acibadem Hospital, Bakirkoy/Istanbul.
4. Faculty, Department of Obstetrics and Gynecology, Acibadem Hospital, Bakirkoy/Istanbul.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Isil Uzun,
Yedikule Konakları B4/4 Yedikule/Istanbul.
E-mail: isiluzu@gmail.com

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