# **Huge Ovarian Cyst Imitating Pregnancy**

Bajracharya N¹, Karki A¹, Dangal G¹, Pradhan H¹, Shrestha R¹, Bhattachan K¹, Poudel R¹ ¹Department of Obstetrics and Gynecology, Kathmandu Model Hospital, Kathmandu

Received: 2-Mar-2018; Accepted: 30-Apr-2018

Ovarian cysts are common findings in females of reproductive age. Mostly, they are non neoplastic and hormonally dependent as follicular, simple, and corpus luteum cysts. Ovarian cysts are rarely grown to reach huge size without raising any symptoms. Most of the cases that have huge cysts present with pressure symptoms over the genitourinary system leading to urinary complaints or the respiratory system lead to respiratory embarrassment.

Dermoid cysts account for 10–20% of all ovarian neoplasms. They are common in young women, especially at the age of 30 years. In most of cases, they are asymptomatic and can be discovered accidentally on clinical examination or ultrasonographic scan. They are usually indolent tumors with very slow rate of growth about 1.8 mm per year. Giant dermoid cysts have been infrequently reported in the literature.

This is a case report of huge dermoid cyst weighing 25 kgs in a 42-year old perimenopausal lady that remained relatively asymptomatic. She underwent Laparotomy with ovarian cystectomy.

Keywords: laparotomy, pregnancy, ovarian cyst

http://dx.doi.org/10.3126/njog.v13i1.21622

### INTRODUCTION

Around 25-30% of all ovarian tumors are of Germ cell origin, 95% of which are benign and 3-4% are malignant. Benign cystic teratomas (Dermoid cyst) account for 10-20% of all ovarian tumors. Histologically, they are composed of variable proportions of tissue originating from the ectoderm, mesoderm, and endoderm. Cystic teratomas are commonly seen in active reproductive years but can occur in any age group and may be seen in postmenopausal women.<sup>1</sup>

They are usually indolent tumors with very slow rate of growth about 1.8 mm per year. With increasing availability of ultrasound services even in developing countries, the diagnosis of benign ovarian tumour is made earlier and the size of the ovarian tumour at diagnosis is relatively small. It is not common to find an ovarian cystic teratoma larger than 10 cm. Giant dermoid cysts have been infrequently reported in the literature.

## CASE

Mrs. R.R. is a 42-year-old Para 1 (1 alive) woman who presented with a 16-years history of

#### **CORRESPONDENCE**

Dr Nishma Bajracharya 2nd Year FCPS Resident, Department of Obstetrics and Gynaecology, Kathmandu Model Hospital, Kathmandu, Nepal. Email: nishu\_bajra@hotmail.com

Phone: 9860-157654

abdominal swelling. Swelling was localized to the lower abdomen, was initially small, and had been progressively increasing in size. There was no associated abdominal pain nor vomiting or change in bowel habits, no urinary symptoms or change in menstrual pattern. Neither history of shortness of breath, palpitation or edema was noted. Patient had amenorrhea since 9 months.



Figure 1- Appearance of the abdominal mass

Physical examination revealed an average built woman with wrinkled skin. She was not pale, febrile, or icteric. Her vital signs were within normal limit. Respiratory and Circulatory systemic findings were unremarkable. The abdomen was uniformly, globular with centrally placed and everted umbilicus. Whitish striae were noted in lateral abdominal wall. No venous dilatations were noted. On palpation, a firm mass of  $\sim 30 \times 25$  cm (Figure 1) was noted with limited mobility from side to side and top to bottom.

The mass was non-tender, had smooth and regular margins with dull note on percussion. Fluid thrills and shifting dullness was noted on flanks Pelvic examination revealed a normal vulva and vagina. The cervix was healthy looking, and the os was closed. An anteverted uterus was palpable separate from the abdominal mass. The lower border of the mass was felt at bilateral fornices, which was non tender. No nodules were palpated at posterior fornix.

CECT Abdomen done revealed a large well defined intraperitoneal cystic mass measuring 25x22x35 cm in right adnexae with dense wall calcifications and small internal area of fat. No internal enhancing solid components noted. The mass compressing the right lateral wall of urinary bladder, displacing the bowels to left side. Anteriorly the lesion is adhering with anterior abdominal wall and posteriorly compressing the Inferior Venacava. No enlarged regional lymph nodes noted. The uterus was normal. Her basic blood tests including the tumor markers were within normal limits. A diagnosis of mature ovarian cystic teratoma was made and she was prepared for exploratory laparotomy. She underwent Total Abdominal Hysterectomy with Bilateral Salpingo-ophorectomy. Intraoperative findings included a large multiloculated right ovarian cyst measuring 40x35 cm and weighing 25 kg containing 12 liters of clear serous fluid. (Figures 2 and 3). The outer surface was smooth, with regular margins, cystic consistency and greyish yellow hue. Cut section of the mass showed large amounts of pultaceous material with engulfed hair. The cyst wall showed some amounts of cartilages and teeth. The left ovary had dermoid cyst of ~4x3 cm size. The histopathological report confirmed the diagnosis i.e., mature teratoma. Postoperatively, the patient had an uneventful course in ward and was discharged stable on 9th post operative day.



Figure 2- Capsule of the dermoid cyst



Figure 3- Clear serous fluid

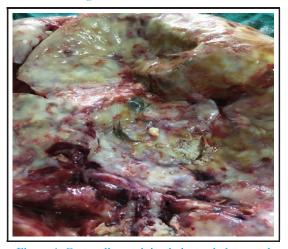


Figure 4- Cyst wall containing hair, teeth, bony and cheesy material

## **COMMENTS**

Dermoid cysts occur mostly during the reproductive years, at ages 20- 40 years. They are bilateral in 10 -13% of cases and so was in our case. The incidence of malignant elements in such teratoma is quite low (approximately 1–2%).<sup>2</sup> They are frequently multicystic and contain sebaceous fluid as well as hair, teeth, bone, and skin. Typically, these tumors contain mature tissues of ectodermal (skin, brain), mesodermal (muscle, fat), and endodermal (mucinous or ciliated epithelium) origin.3 They have a characteristic CT scan appearance with fat/fluid level attenuation and calcification or ossification. The classic sonographic appearance is of a hyperechoic mass termed as a dermoid plug or Rokitansky protuberance. This Rokitansky protuberance is composed of the thickened area of ectodermal tissue from which hair, bone and teeth arise. Pain is usually related to the size of the mass, and ovarian torsion is common.3

Mature cystic teratomas grow slowly at an average rate of 1.8 mm each year, prompting some gynecologists to advocate non-surgical management of smaller (6 cm) tumors. These features were not found in our case. There can be malignant transformation of mature teratoma. Also there are few cases reported in which benign tumor (oftenly mucinous cystadenoma coexist with mature teratoma).<sup>4</sup>

The surgical management of mature cystic teratomas should be directed according to age, desire for future fertility and presence of any concomitant pelvic pathology rather than size or the laterality status. Laparoscopic management of benign dermoid cysts is safe and effective and can therefore be highly

recommended.<sup>5</sup> In Our patient as the tumor size was very huge reaching up to xiphisternum, decision of laparotomy and cystectomy was made. This case highlights very atypical features dermoid cysts.

#### **CONCLUSIONS**

There are many reported cases of ovarian tumor in perimenopausal women but a huge dermoid cyst is very rare. Timely diagnosis and surgery is the key to management.

# **CONFLICT OF INTEREST**

None

### REFERENCES

- Berek J. Berek and Novak's Gynecology. 15th ed. Philadelphia: Wolters Kluwer; 2015.
- Einarsson JI, Edwards CL, Zurawin RK. Immature ovarian teratoma in an adolescent: a case report and review of the literature. Journal of pediatric and adolescent gynecology. 2004 Jun 1;17(3):187-9.
- Outwater EK, Siegelman ES, Hunt JL. Ovarian teratomas: tumor types and imaging characteristics. Radiographics. 2001 Mar;21(2):475-90.
- Morimitsu Y, Nakashima O, Kage M, Kojiro M, Kawano K, Koga T. Coexistence of mature teratoma and thecoma in an ovary. Pathology International. 1991 Dec 1;41(12):922-6.
- Dayan R. Huge Dermoid Cyst 7 kg Weight in a Post-Menopausal Woman Mimicking a Malignant Ovarian Tumour: Rare Case with Review of Literature. General Medicine: Open Access. 2016 May 15.