

AN UNUSUAL CASE OF BILATERAL MULTIPLE OVARIAN DERMOID CYSTS

Nasim Akhtar¹, Fatima²

^{1,2} Department of obstetrics & gynaecology, Mardan Medical complex, Mardan - Pakistan.

Address for correspondence:

Dr. Nasim Akhtar

Professor, Department of obstetrics & gynaecology, Mardan Medical complex, Mardan - Pakistan.

E-mail: nasimakhtarbkmc@hotmail.com

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ABSTRACT

Although the incidence of bilateral dermoid cysts varies from 10-15%, multiple ovarian mature cystic teratomas in the same ovary are very rare. A young 30 years old nulligravida, married for 5 years presented to our outdoor with intermittent pain hypogastrum for the last 3 months. The case was diagnosed on Ultrasonography to be bilateral multiple teratomas due to presence of hyper-echoic solid components in the cysts. On Laparotomy ovaries were conserved & three dermoid cysts were enucleated from both ovaries. Diagnosis was confirmed on histopathology as dermoid cysts. Complete clearance of both ovaries at the time of excision of dermoid is essential to nullify the risk of recurrence.

Key Words: Ovarian tumours, teratoma, Dermoid cysts

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INTRODUCTION

Tumours of ovary are very common in women. It is the fourth most common cause of hospital admission in England. WHO classified ovarian tumours according to similarity in cell types. Up to 65% of ovarian tumours are of epithelial origin & 90% of malignant ovarian tumours are of epithelial type¹.

Dermoid cysts are the most common germ cell tumours of young age they are usually unilateral but in about 15-20% they are bilateral. Multiple dermoid cysts in the same ovary are rare² & this case is one of the bilateral multiple teratomas. Simple follicular cysts usually subside spontaneously and no intervention is recommended even upto the size of 8 centimeters but dermoid cysts no matter how small need surgical intervention and clearance. As germ cell tumours occur in reproductive age they are one of the causes of infertility in these patients.

CASE REPORT

A 30 years old lady with five years of primary infertility had pain left iliac fossa for the last three months. It was dull, aching and radiating to whole of hypogastrum. It was not associated with vomiting, constipation or bleeding. On examination uterus was normal in size anteverted with a freely mobile left adnexal mass of about 7x7 cms in size. Ultrasound evaluation revealed two cystic masses of 7 cms and 2 cms diameter in the

left ovary and a 3 cms cyst in the right ovary with hyper-echoic Rokitansky nodule visible in it. The ultrasound pattern was compatible with bilateral ovarian dermoid cysts. At laparotomy all the three cysts were enucleated and ovaries were repaired. Cut section revealed hair, sebaceous material and a solid area. Histopathology report confirmed mature cystic teratoma. She remained well over the six months follow up period so far, since her surgery.

DISCUSSION

They are called dermoid cysts because they comprise of all skin appendages i.e., ectodermal structures in 100% of cases. Germ cell is a totipotent cell therefore almost all types of body tissues are present in these tumours including bone, hair, teeth, nails, thyroid & even brain tissue. This is the reason that they are also called teratomas which means monster in greek³ Teratomas are of three types mature, immature & monodermal. According to one theory they develop by parthenogenesis from a single haploid germ cell⁴. Although they make upto 30% of ovarian tumours but very few are malignant accounting for less than 5% of ovarian cancers. Upto 20% of germ cell tumours present after menopause⁵. Upto 60% of young age malignancies belong to germ cell type⁵.

In addition to ultrasound, they can also be diagnosed by plain x-ray abdomen due to presence of calcified structures like bone & teeth within in the cyst.

They are slow growing tumours and are usually asymptomatic until they reach considerable size even up to 40 centimeters⁶. Usually a solid area composed of a combination of largest variety of tissue types is found in the cyst and is called Rokitansky protuberance. Its histological examination is recommended even if decalcification is required. Torsion, rupture, infection, adhesions formation & malignant transformation are some of the common complications⁷. Malignant transformation is reported in 1%, squamous carcinoma being the most common malignancy⁷. In this case it was also responsible for subfertility of the patient.

CONCLUSION

Multiple ovarian mature cystic teratomas in the same ovary are very rare. At the time of enucleation and excision of dermoid cysts both ovaries should be thoroughly examined to ensure that all dermoid cysts have been removed. It is essential in order to prevent recurrence which is common after multiple bilateral teratoma and although a benign tumour it needs close follow up.

REFERENCES

1. Sundar S, Neal RD, Kehoe S. Diagnosis of ovarian cancer. *BMJ*. 2015;351:h4443.
2. Sinha R, Sethi S, Mahajan C, Bindra V. Multiple bilateral dermoids: a case report. *J Minim Invasive Gynecol* 2010; 17:235-8.
3. Choukimath SM, Ramalingappa CA. Multiple and bilateral benign cystic teratomas of ovary with broad ligament leiomyoma: a case report. *Int J Med Biomed Res* 2012; 1:158-60.
4. Alanbay I, Çoksuer H, Ercan M, Kardeş E, Keskin U, Başer I. Multiple Recurrent Mature Cystic Teratoma Of The Same Ovary: A Case Report And Literature Review. *Med J Kocatepe* 2011; 12: 8-12.
5. Edmonds K. Dewhurst's textbook of Obstetrics & Gynaecology. 8th ed. London. Willey-Blackwell; 2012:713.
6. Katke RD. Torsion of huge cystic teratoma of ovary with multiple fibroids uterus: a case report and review of literature *Int J Reprod Contracept Obstet Gynecol* 2014; 3:793-5.
7. Rekhi B, Parikh P, Deodhar KK, Meheshwari A, Kerkar R, Gupta S. Squamous carcinoma coexistent with teratoma of ovary: A clinicopathological study of 12 cases diagnosed over a 10-year period at a tertiary cancer referral center. *J Cancer Res Ther* 2015; 11:211-5.