

BILATERAL DERMOID CYST OF THE OVARY: A CASE REPORT.

Njoku C^{1,2}, Oriji PC^{1*}, Afolabi AS^{1,2}, Kuete E¹.

¹Department of Obstetrics and Gynaecology, Federal Medical Centre, Yenagoa, Bayelsa State, Nigeria.

²Department of Obstetrics and Gynaecology, Gloryland Medical Centre, Yenagoa, Bayelsa State, Nigeria.

*Correspondence: Dr. Oriji, Peter Chibuzor; +234 706 423 3209; chibuzor54@gmail.com

Abstract

Background: Dermoid cysts are benign germ cell tumours which make up to 10 – 25% of all ovarian tumours, and are bilateral in 10– 15% of cases. They are usually found in women of reproductive age-group but can also be found in post-menopausal women, and are usually asymptomatic.

Case presentation: She was a 38-year-old P₃⁺⁰ (with two living children), who presented to the gynaecological clinic of the Federal Medical Centre, Yenagoa with six-month history of abdominal mass and one-week history of lower abdominal pain. She was investigated; subsequently had exploratory laparotomy with bilateral salpingo-ovariectomy and followed up for one year.

Conclusion: Ovarian tumours usually present with non-specific symptoms. Early recognition of a Dermoid cyst and intervention are necessary to avoid potential complications.

Keywords: Dermoid cyst, germ cell tumours, salpingo-ovariectomy.

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INTRODUCTION

Detection of ovarian cysts causes considerable worry for women because of the fear of infertility and malignancy, but fortunately majority of ovarian cysts are benign¹. Ovarian cysts are usually asymptomatic. They may remain asymptomatic, may present with gastrointestinal symptoms of anorexia and abdominal bloating or may present with acute abdomen due to ovarian cystic accident. Dermoid cysts are usually benign and unilateral, but may also be bilateral².

CASE PRESENTATION

She was a 38-year-old P₃⁺⁰ (with 2 living children) who presented to the gynaecological clinic of the Gloryland Medical Centre, Yenagoa with six-month history of abdominal mass and one-week history of lower abdominal pain. There was no mass in any other part of the body. There was associated early satiety, and abdominal bloating, but no vomiting,

change in bowel habits, weight loss, inter-menstrual bleeding, leg swelling or lower limb varicosity. She did not have any previous medical or surgical condition. There was no family history of similar complaints.

General examination revealed a young woman, not in any form of distress, not pale, anicteric with no lymphadenopathy or pedal oedema. Her body mass index was 24.7 kg/m². Abdominal examination revealed a full abdomen with a suprapubic bulge. It moved with respiration. The umbilicus was flat. There was an 18-week pregnancy size firm, non-tender mass with smooth surface. The upper and lateral borders was well defined, but the lower border was not felt. The mass was mobile from side to side; not attached to overlying skin or underlying structures. There was no bruit over the mass and there was no demonstrable ascites. The bowel sounds were

normal. Vaginal examination revealed a mass that was separate from the uterus.

Pelvic ultrasound scan reported a right ovarian tumour of 15 cm × 12 cm, with mixed echogenicity, fat, fluid contents and multiple septations. The left ovary measured 9 cm × 5 cm, unilocular with mixed echogenicity. The uterus was anteverted and normal in size. There was no ascites seen.

CA 125 was 22 IU/ml which was within the normal range. Full blood count, serum electrolytes, urea, and creatinine and liver function test were all normal.

A diagnosis of bilateral ovarian cyst was made. She was counselled on the findings and diagnosis, and the need to do an exploratory laparotomy for her with possible risk of losing both ovaries. Written informed consent was obtained. The anaesthetist was invited to review her and the theatre was booked for surgery. Intraoperative findings were right ovarian mass measuring 16 cm x 12 cm [Figures 1 & 3]; cystic with solid components and a visible tuft of hair through the transparent wall. The left ovarian mass measured 8 cm x 6 cm [Figures 2 & 3]. Cystic with solid components. The uterus and fallopian tubes were grossly normal. She had bilateral salpingo-ovariectomy with care taken to avoid rupture of the cyst. The tissues were sent to the histopathology laboratory for histology. The postoperative period was satisfactory. She was discharged on the 7th post-operative day after removal of sutures, and was seen at the gynaecological clinic in 4 weeks.

Histopathology reported right and left sections that showed cystic lesions with multiple septations which were lined by stratified squamous epithelia. Skin appendages were seen within the walls of the cysts. Overall picture was consistent with benign cystic teratoma.

She was followed up 3-monthly for one year. There was no abdominal pain or abdominal swelling. Her menstrual periods were normal. Pelvic ultrasound sound scan did not reveal any abnormality.



Figure 1: The right dermoid cyst.



Figure 2: The right dermoid cyst.



Figure 3: The right and left dermoid cysts

DISCUSSION

Dermoid cyst is also known as benign cystic teratoma. The word “teratoma” is derived from the Greek word “teraton” which means monster. Leblanc in 1831, coined the term “dermoid cyst”^{3,4}. Dermoid cysts are benign germ cell tumours⁵. They make up to 10 – 25% of all ovarian tumours⁵.

They are usually found in women of reproductive age-group but can also be found in post-menopausal women⁵. The peak age incidence is 25 – 45 years. About 10 – 15% of dermoid cysts are bilateral while 85 – 90% are unilateral⁵. Dermoid cysts are initially asymptomatic when they are small, and become symptomatic when their sizes increase⁵. The patient presented had abdominal swelling with associated anorexia, bloating and abdominal pain and abdominal pain⁵. They are usually unilocular with smooth surface, contains sebaceous material and hair, lined by squamous epithelium⁵. Cartilage, bone, teeth, bronchial mucous membrane and thyroid tissue are found in the wall of the cyst⁵. They have tissues from all the three germ cell layers which include ectoderm, endoderm and mesoderm⁵. However, ectodermal structures predominate.

Complications that may arise from dermoid cyst are torsion, rupture, haemorrhage, infection, recurrence (3 – 4%) and rarely malignant transformation (1.7%)⁵. Intraoperative spillage may result in chronic granulomatous peritonitis. Ultrasound scan is a very useful non-invasive tool used to make a diagnosis of ovarian cyst as was used for this patient. However, computerised tomography scan or magnetic resonance imaging, where available can also be used. The diagnosis is confirmed histologically.

Management options for patients with dermoid cysts include surgical excision through laparotomy or laparoscopy as this can provide definitive diagnosis, afford symptom relief, and prevent complications⁶. Laparoscopic management is a safer and preferred for young women who are desirous of fertility⁷. Surgical options include cystectomy, unilateral salpingo-ovariectomy or bilateral salpingo-ovariectomy. The patient presented had bilateral salpingo-ovariectomy.

Fertility options for this patient include ovarian tissue cryopreservation, invitro fertilization with donor oocytes and adoption. This patient will also benefit from hormone replacement therapy if symptoms of Surgically induced menopause are distressing.

CONCLUSION

Ovarian tumours usually present with non-specific symptoms. Early recognition and intervention are necessary to avoid potential complications. Excision alone often suffices in the treatment of this condition.

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