

Huge Mucinous Cystadenoma Presenting as an Acute Abdomen in the Puerperium

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INTRODUCTION

Adnexa masses occur in one out of two hundred pregnancies (1). Many are benign ovarian cysts diagnosed in women during antenatal care and managed conservatively with success. Occasionally, ovarian accidents occur that necessitate emergency surgeries. However, in women, unbooked during pregnancy, presentation to hospital may occur for the first time in the puerperium and it may pose a diagnostic challenge. We present the case of a 33-year old multipara who presented with acute abdomen in the puerperium. The initial diagnosis was that of a ruptured uterus until ultrasound scan and intraoperative findings proved otherwise.

Keywords: Acute abdomen, mucinous cystadenoma, ovary, puerperium

CASE REPORT

A 33-year old para 4⁺⁰ trader presented two days after delivery with severe, generalized abdominal pain associated with abdominal distension and constipation which commenced with onset of labour.

She was unbooked in that pregnancy but noticed that her abdomen was larger than her previous pregnancies. She went into labour at nine months (she was unsure of her dates) and this lasted 18 hours after which she delivered a live male baby at home. The labour was difficult and she had fundal pressure applied. She, however, noticed that there was no appreciable decrease in her abdominal size after delivery. She developed severe abdominal pains which were of a different nature to the labour pains, occasioning her presentation to hospital 48 hours after delivery. Her previous pregnancies were uneventful and her past medical history was not significant.

On examination, she was mildly pale, moderately dehydrated and in acute pain. Her blood pressure was 110/80 mmHg and pulse rate was 120 beats per minute. The chest was clinically clear. She had generalized abdominal tenderness; it was distended with a girth of 104 centimeters. There was a palpable abdomino-pelvic mass which was comparable to a 28-week gestation. There was ascites and bowel sounds were heard. An impression of an acute abdomen probably due to ruptured uterus was made.

She had urgent laboratory investigations: haemoglobin was 12 g/dL, urinalysis, electrolytes and urea were within

normal units. An ultrasound scan revealed a bulky uterus with empty cavity. There was a large cystic mass arising from the pelvis probably from the right ovary extending up to the right hypochondrium. It was 20 cm by 28 cm in size. There were multiple fibrous strands within the mass. The left ovary and other abdominal viscera were normal. A diagnosis of huge right ovarian cyst was made.

She had emergency laparotomy and right salpingo-oophorectomy. The intraoperative findings were intact uterus, healthy left ovary and fallopian tube. The liver, spleen and bowels were normal. There was a huge haemorrhagic right ovarian cyst extending to the infrahepatic area measuring 30 cm by 22 cm (Figs. 1, 2), the pedicle was twisted. Blood loss was 300 millilitres. She had an uneventful postoperative recovery and was discharged home on the ninth day.



Fig. 1: Ovarian cyst being removed from abdominal cavity.

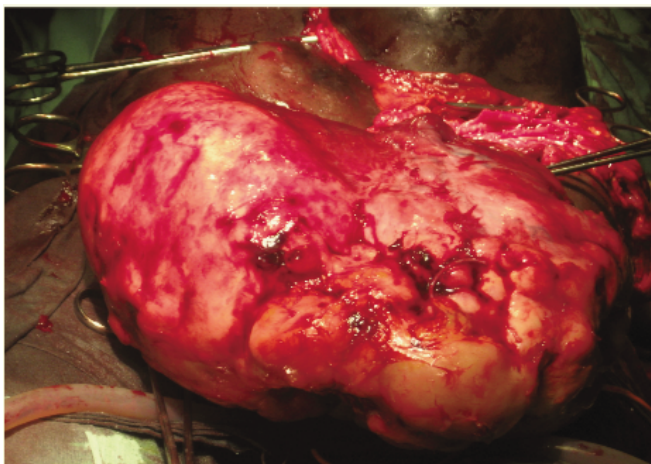


Fig. 2: Ovarian cyst after removal.

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Histopathology revealed a huge lobulated cystic mass 24 cm by 17 cm by 9 cm weighing 2.1 kg. Cut section showed a multilocular cyst with brown, gelatinous material and necrotic, cystic lining and inflammatory cells. The overall picture was that of mucinous cystadenoma with haemorrhagic necrosis.

DISCUSSION

This patient had a cyst which coexisted with pregnancy and apparently gave her little or no symptoms; this is not unusual as it was a benign cyst. Benign ovarian cysts and other adnexal masses are common, occurring in 1 in 200 pregnancies (1). They are often asymptomatic and may resolve spontaneously except when large or hormone-secreting (2). They may coexist with pregnancy in which torsion or bleeding may occur (2, 3). They may prevent engagement of the presenting fetal part if they are large. Occasionally, a dermoid cyst may leak or rupture causing peritonitis (4), otherwise many ovarian cysts are usually discovered incidentally during pregnancy and the symptoms are often ascribed to the pregnancy.

The unusual size of her pregnant abdomen made her think she had a twin gestation which is common especially among Yoruba people of Nigeria [her ethnic group] (5, 6). The associated abdominal pain was masked by onset of labour. The pressure applied to the uterine fundus is done commonly by untrained birth attendants in the hope of overcoming dystocia. This might have resulted in torsion and haemorrhage into the cyst. Moreover, uterine involution in the puerperium may also encourage torsion (3).

Mucinous cystadenoma occurs in 15–25% of ovarian tumours (2) and is the second most common epithelial tumour (4). They are typically large, unilateral, multilocular cysts with a smooth surface. Some have reported cysts weighing up to 14 kg (1, 2). They may also cause pseudomyxoma peritonei (3) which the index case did not have.

This case underscores the value of antenatal care (ANC) which is still underutilized in many parts of Nigeria

for many reasons (7, 8). Antenatal care would have given her the opportunity to have an ultrasound scan (9) or pelvic examination which might have led to the diagnosis and subsequent management. On the contrary, she neither had ANC nor delivery by a skilled birth attendant. This might have been due to poverty, making her unable to pay for healthcare or ignorance about the benefits of ANC (8). This case is a reminder that huge ovarian cysts may coexist with pregnancy and may only manifest in the puerperium due to accidents associated with uterine involution. It is also a reminder that it is not every patient with acute abdomen in the peripartum period that might have a ruptured uterus. Finally, ultrasound scan is a valuable diagnostic tool in obstetrics and gynaecology and has a role even in resource-constrained countries.

REFERENCES

1. Katz VL, Watson WJ, Hansen WF, Washington JL. Massive ovarian tumour complicating pregnancy – a case report. *J Reproductive Med* 1993; **38**: 907–10.
2. Girsling JC, Soutter WP. Benign tumours of ovary. In: Shaw RW, Soutter WP, Stanton SL, eds. *Gynaecology*. 2nd ed. Edinburgh: Churchill Livingstone; 1997; 615–25.
3. Cunningham FG, Gant NF, Leveno KJ, Gilstrap LC, Hauth JC, Wenstrom KD. Abnormalities of the reproductive tract. In: Cunningham FG, Whitbridge WJ. *Williams Obstetrics*. 21st edition. New York: McGraw-Hill Medical Publishing Division; 2001; 930–2.
4. Briggs ND. Common gynaecological tumours. *Trop J Obstet Gynaecol* 1995; **12**: 63–7.
5. Etuk SJ. Twinning in the West African Sub region: historical and current perspectives. *Mary Slessor Journal of Medicine* 1998; **1**: 1–5.
6. Odum CU. Multiple pregnancy. *Trop J Obstet Gynaecol* 1995; **12** (Suppl 1): 12–18.
7. Iyaniwura CA, Yussuf Q. Utilisation of antenatal care and delivery services in Sagamu, SouthWestern, Nigeria. *Trop J Obstet Gynaecol* 2008; **25**: 39–50.
8. Udoma EJ, Itina SM, Ekanem AD, Mboho MM. Prevention of maternal mortality by training the birth attendants of church-based maternity homes in Akwa-Ibom state. *Trop J Obstet Gynaecol* 2005; **22**: 180–3.
9. Okaro E, Condous G, Bourne T. Use of USS in the Mx of gynaecologic conditions. *Progress in Obstetrics and Gynaecology* 2003; **15**: 279–82.