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Heterotopic Pregnancy (Ruptured) With Subchorionic Bleeding: A Case Report

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ABSTRACT

Background: Heterotopic pregnancy is a rare complication. In this uncommon event both extra uterine and intrauterine pregnancy coexists. Heterotopic pregnancy could be potentially fatal without early surgical intervention and management. Case presentation: We report a rare of combined ectopic pregnancy. A 44-year-old G8 P6 8 weeks pregnant woman with history of previous twin miscarriage presented with severe lower abdominal pain, vomiting and bilateral renal angle tenderness. An emergency pelvic and transabdominal ultrasonography aided in the diagnosis of heterotopic pregnancy. Emergency exploratory laparotomy revealed massive damage to surrounding tissues so a total hysterectomy was performed to prevent further complication and mortality. Conclusion: Heterotopic pregnancy should be suspected in patients with an adnexal mass, even in the absence of risk factors. Timely surgical intervention will help lower obstetric morbidity and mortality.

Key words: Case report, heterotopic pregnancy, bilateral adnexal mass, lower abdominal pain.

BACKGROUND

Heterotopic occurs when one fertilized ovum implants abnormally outside of the uterus and most often ruptures if the implantation is tubal (8). Ovulation induced medications, women on fertility treatment, Pelvic Inflammatory Disease (PID), tubal surgery and previous ectopic pregnancies have high risk of developing heterotopic pregnancy (5).

Patient with this condition may or may not have symptoms, this is because half of these type of pregnancies is only diagnosed when the fallopian tube ruptures (1). However, common symptoms include: Abnormal vaginal bleeding, mild-to-severe abdominal pain or cramping, pain at the side, dizziness, fainting, nausea and vomiting (1).

Heterotopic pregnancy was first observed and diagnosed in 1708 by Duverney (3) and the incident rate stood as 1 in 30,000 pregnancies. Later reports revised this to 1 in 3,889

pregnancies (Bello et al, 1986). However, the more recent incidence rate has increased to 1 in 100 pregnancies (1,9). Transabdominal and transvaginal sonography are mostly preferred imaging modalities for diagnosis, evaluation and ultimately managing heterotopic pregnancies (11).

We present a rare case of heterotopic pregnancy with live intrauterine gestation and ruptured left adnexal complex mass in a natural conception.

CASE PRESENTATION

A 44-year-old woman, gravida 8, para 6 referred with 8weeks pregnancy and complaining of severe lower abdominal pain and bilateral renal angle tenderness. She was referred from poly clinic to the maternal emergency unit. She looked very weak, vomiting with severe lower abdominal pain to touch according to the nurse's notes. Initial suspicion was severe urinary tract infection (UTI), pelvic inflammatory disease (PID) and ectopic pregnancy. She had had a previous twin miscarriage which is remarkable obstetrically. The six deliveries were spontaneous vaginal deliveries. Her past medical history was insignificant to the occurrence of the present condition.

On physical examination, her temperature was 36.3°C, heart rate was 88 beats per minute, blood pressure was 111/50 mmHg oxygen saturation level of 98% and random blood sugar (RBS) was 10.4.mol/L. Abdominal examination revealed bilateral renal angle tenderness. No foetal heart beat was perceived at the time of assessment.

Laboratory investigation showed serum pregnancy test as positive with no UTI or PID observed. Her red blood cell, hemoglobin concentration and haematocrit were below normal and read 2.28x 10^{12}/L, 6.7 gm/dL and 18.8% respectively. A transabdominal ultrasonography was performed and scanned images obtained as following (Figure 1, 2, 3 and 4). A live foetal pole was observed in a gestational sac within the endometrium. CRL measured 1.57cm (8weeks, 0days gestational age). There was evidence of significant sub-chorionic bleed, however, no sporting of blood by the patient. Pouch of Douglas (POD), Morrison's pouch and the peritoneal cavity showed significant fluid collection with minimal internal echoes. There were bilateral complex adnexal masses with the pain been felt at the left side. The mass at the left adnexa measured 7.35x5.29cm and that of the contralateral side measured 5.17x2.29cm.

The client was put on intravenous fluid of normal saline, ringers' lactate, and dextrose saline. Medications of intramuscular pethidine and diclofenac were prescribed in succession to manage the pain. Intravenous amoxiclav was prescribed to manage the infection, Laparotomy was performed based on the ultrasound report. There was severe damage to the reproductive system, hence total hysterectomy was done. The following Figures: a, b, c and d below indicate the images obtained during the operation. The patient lost significant volume of blood so two pints of blood were transfused. She became stable after 24hours. A histopathology request was turn down by the patient due to her inability to afford. No immediate maternal complication was observed during the post-operative period.

DISCUSSION AND CONCLUSION

Heterotopic pregnancy is a rare pregnancy complication in which both extra uterine and intrauterine pregnancy coexists. This condition is classified as potentially fatal if not detected

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earlier (7). Even though, the first incident occurs in 1708 by Duverney with an incident rate of 1 in 30,000 patients (3), it has since increased significantly to 1 to 100 patients (1,9). This should alert the clinician that, confirming an intrauterine pregnancy clinically or by ultrasound does not necessary exclude heterotopic pregnancy (6). The incidence is reported to be much higher in women with a history of PID, tubal surgery, previous ectopic pregnancies, ovulation induced medications (5,7).

With the case under consideration, the patient had symptoms of vomiting, dizziness and with severe lower abdominal pain to touch which corresponds to the previous study conducted (4). In this case, initial suspicion was severe UTI, PID and ectopic pregnancy. However, transabdominal ultrasound was instrumental in revealing the actual diagnosis. The patient had a history of recent twin miscarriage, could this be a possibly risk factor of having an ectopic pregnancy?

There was significant haemoperitoneum as a result of the ruptured ectopic and this is in allied with previous case reports (1,12). The patient was transfused 2 units of packed red blood cells as a result of massive blood loss into the peritoneal cavity. Laparotomy which has been the remedy in most ectopic pregnancy (10,12) was performed, however, in this case total hysterectomy was done due to the complication of the reproductive system.

In view of the increasing incidents of heterotopic pregnancy, clinicians and midwifes should refer every suspected early pregnancy for proper laboratory investigation and ultrasound assessment for possible heterotopic pregnancy most especially patient with the lower abdominal pains.

List of Abbreviations
CRL-Crown-rump length
PID-Pelvic Inflammatory Disease
PoD-Pouch of Douglas
UTI-Urinary Tract Infection
RBS-Random Blood Sugar

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FIGURES AND LEGENDS

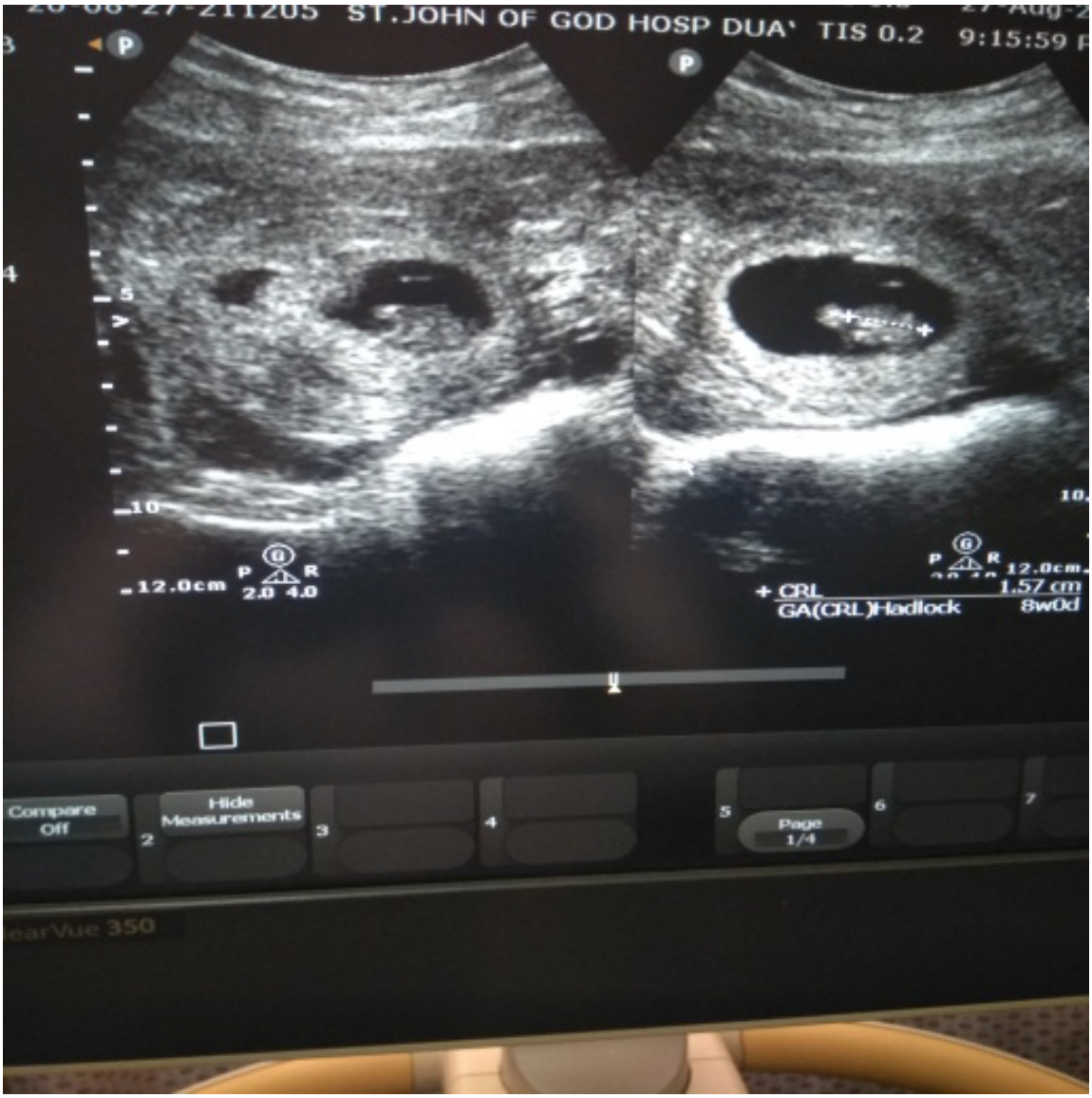

Figure 1 Intrauterine viable fetal pole of 8weeks. 0day with sub-chorionic bleed.

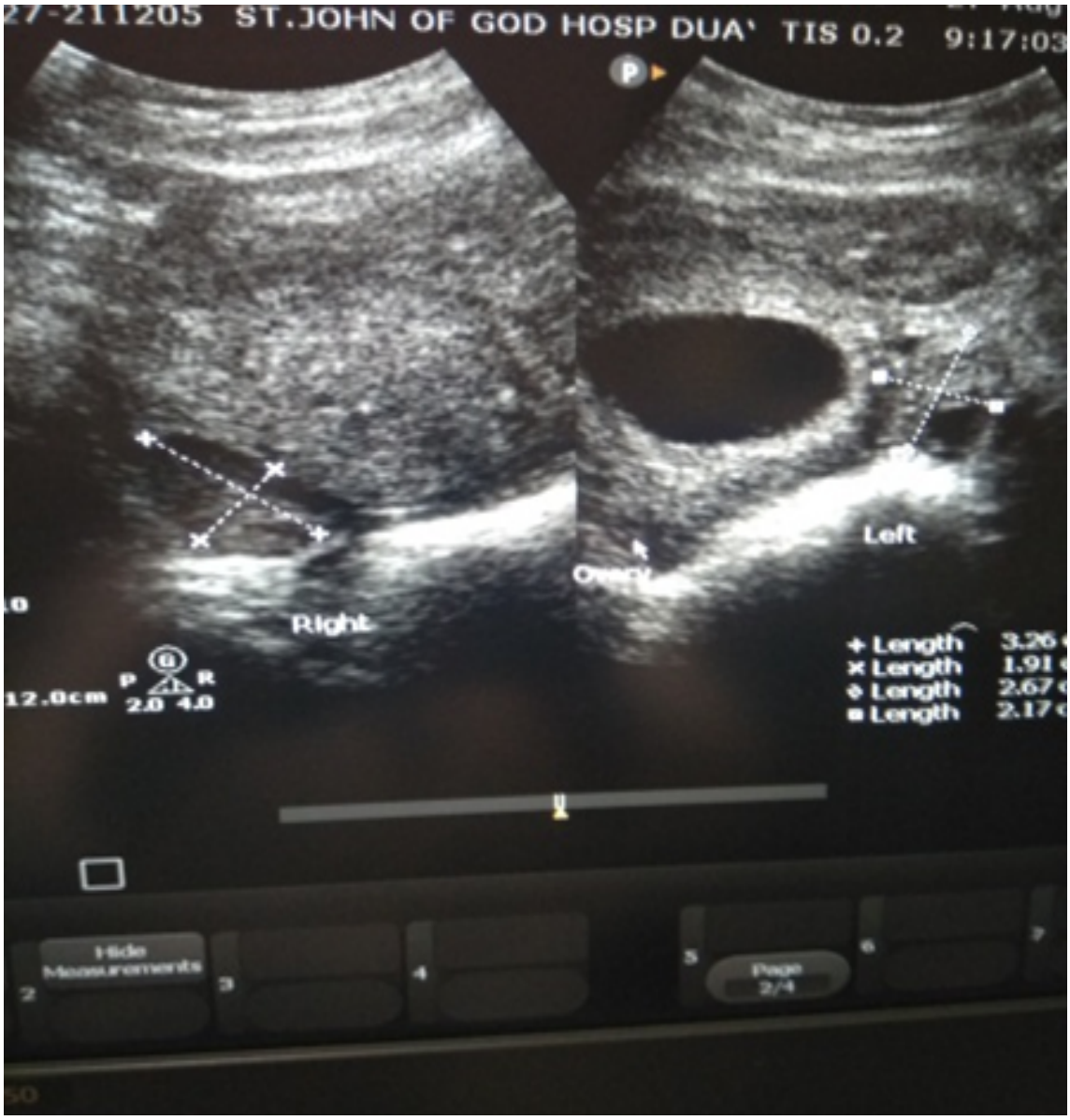

Figure 2 Measurement of Lt. and Rt. Ovaries and left complex adnexal mass (5.17x2.29cm)

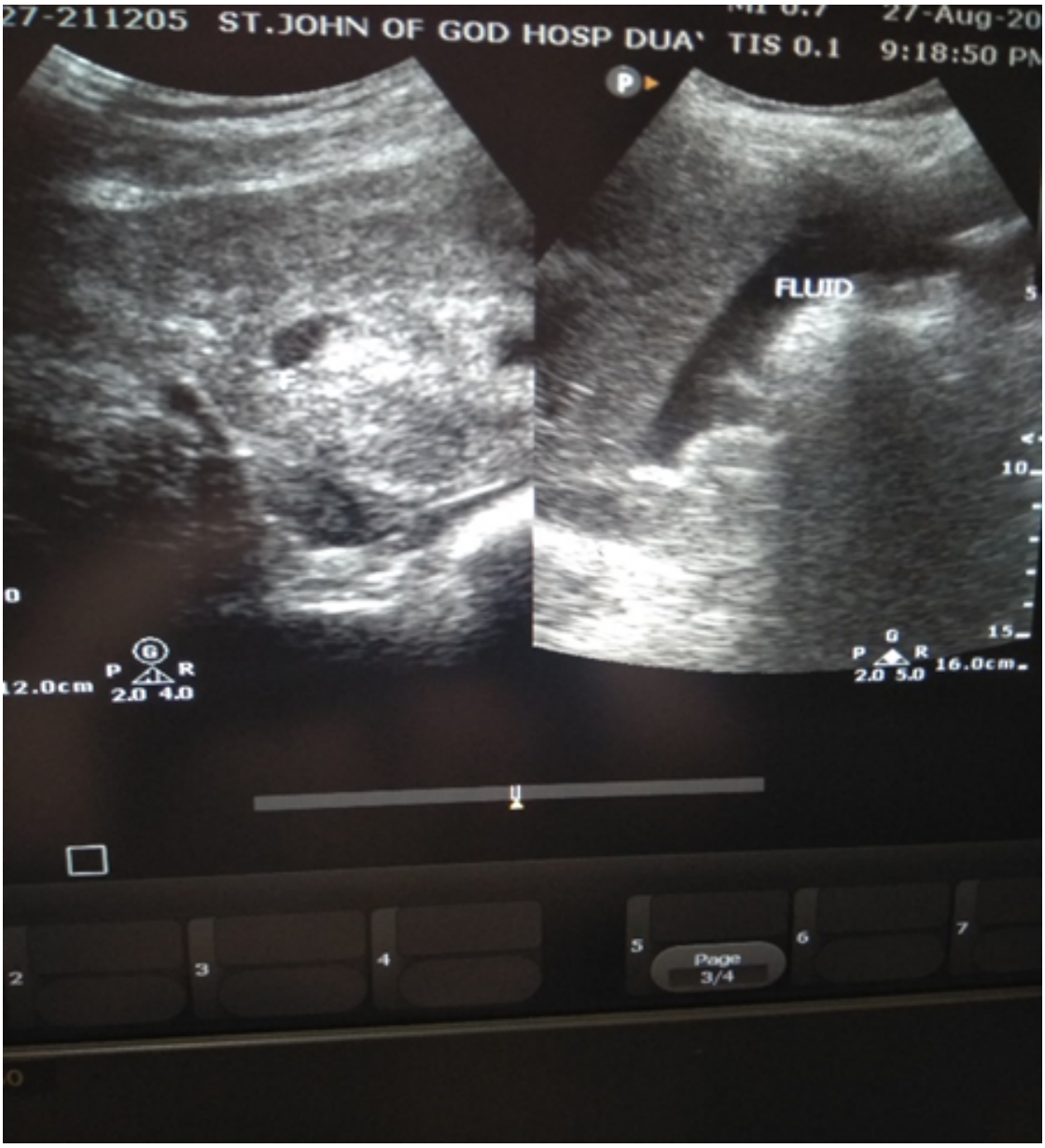

Figure 3 Indicate fluid collection in peritoneal

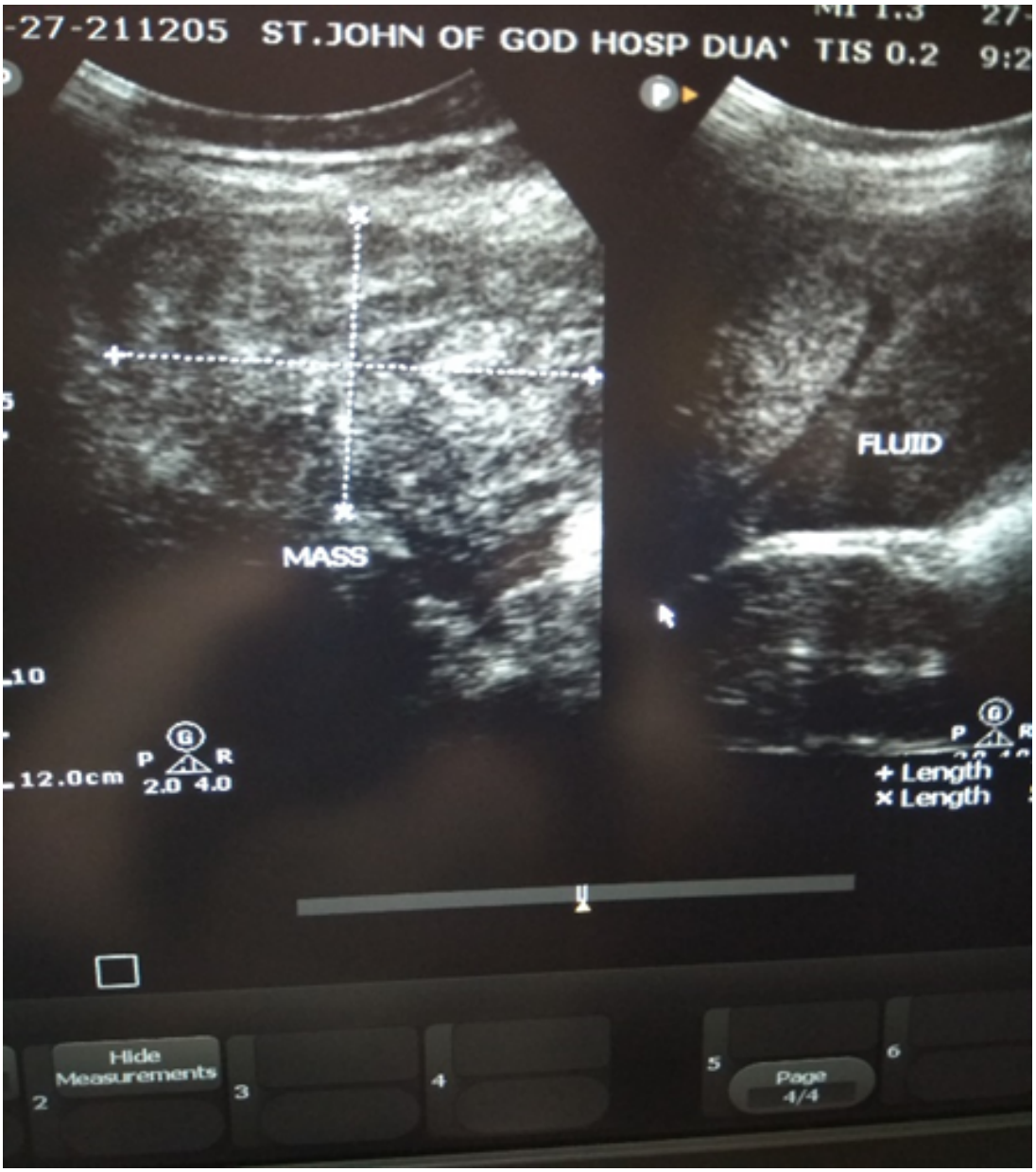

Figure 4 Shows huge right complex adnexal mass of 7.35x5.29cm

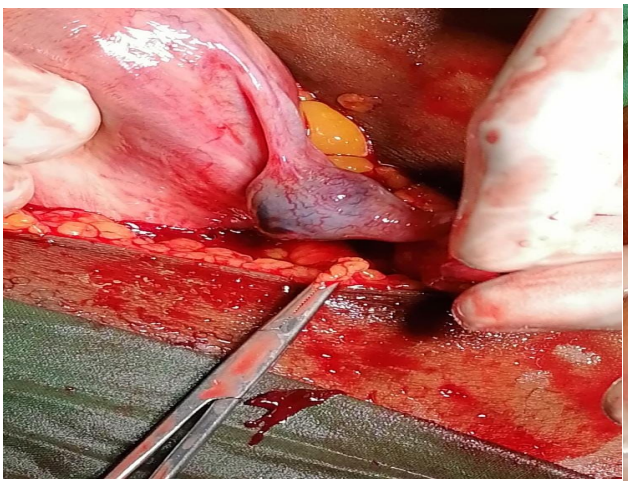

Fig. a. Complex left adnexal mass

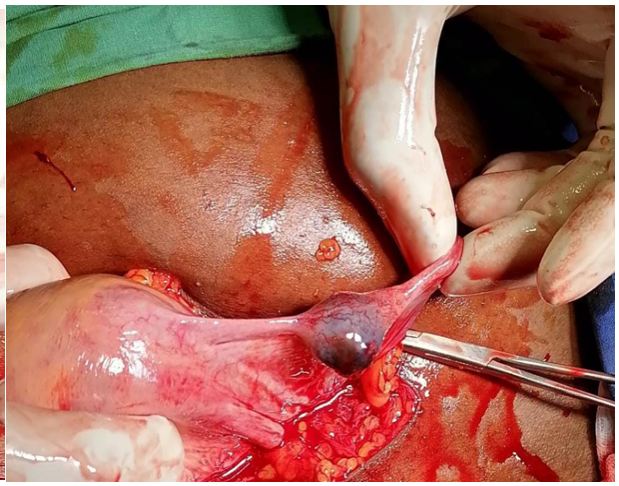

Fig. b: shows blood clot at right adnexa

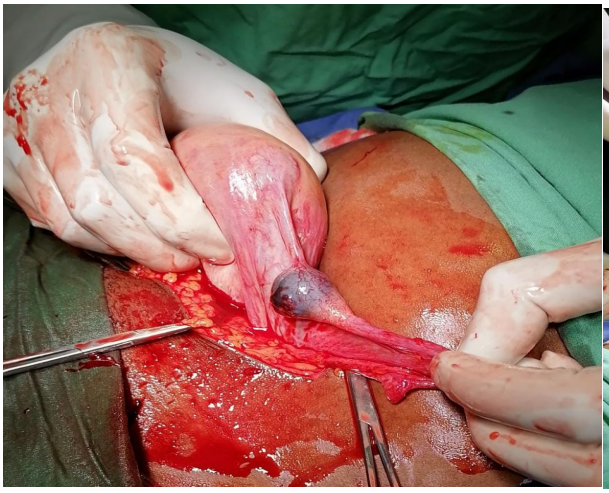

Fig. c: Removal of the gravid uterus (Hysterectomy)

Fig. d: shows collection of blood clot in the kidney dish