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## Case Report

# Multiple uterine fibroids: risk for ectopic pregnancy – a case report and review of literature

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## ABSTRACT

Ectopic pregnancy is a medical emergency that still has a huge debilitating effect on maternal health. This condition can result in hemorrhagic shock with resultant morbidity and mortality when it is mis-diagnosed or there is delay in diagnosis and management. We present a 40year old multiparous lady with multiple uterine fibroids and without other identifiable risk factors for ectopic pregnancy who suddenly lapsed into shock and had a successful appropriate and timely intervention-Salpingectomy for ruptured ectopic pregnancy.

**Keywords:** Multiple Uterine fibroids, Risk factor, Ectopic pregnancy, Case report

## INTRODUCTION

Ectopic pregnancy is the implantation of the fertilized ovum outside the uterine cavity. It occurs in approximately 1-2% of all pregnancies and the most common site for ectopic pregnancy is the fallopian tubes, predominantly, in the ampullary region of the fallopian tube (98%).<sup>1</sup> Other sites of ectopic pregnancy implantations are the ovary, the cervix, previous caesarean section scars and abdominal ectopics have been described where the fertilized embryo implants in the abdominal cavity.<sup>2</sup> There are several recognized risk factors for ectopic pregnancy, and these include: rare congenital anomalies of the fallopian tubes and in utero exposure to Diethyl stilboesterol (DES). Other risk factors include cigarette smoking – which has been implicated in altered physiological activity of the cilia in the fallopian tubes, sexually transmitted infections and pelvic inflammatory diseases – outcome of multiple sexual

partners and unprotected sexual intercourse, Assisted Reproductive Technology (ART), prior history of ectopic pregnancy and prior tubal surgeries. Also, Ectopic pregnancies has been associated with induced abortions and nulliparous women were mostly affected.<sup>3</sup> The use of contraceptives in the form of Intra Uterine Device (IUD) has also been implicated in the development of ectopic pregnancy and in the rare case that a woman does become pregnant while she has an IUD, the prevalence of Ectopic pregnancy is as high as 53%.<sup>4</sup> Hwang et al in Taiwan reported in their study, other identified risk factors for ectopic pregnancy to include Endometriosis, Polycystic ovaries, benign neoplasm of the ovary and uterine Leiomyoma.<sup>5</sup> The mechanism by which some of these risk factors cause ectopic pregnancy is by toxic, immunologic, and humoral processes in the tube. This will result in up regulation of pro inflammatory cytokines followed by tubal damage; this subsequently promote embryo

implantation, invasion and angiogenesis within the fallopian tubes.<sup>6</sup>

Ectopic pregnancy may be asymptomatic (earlier gestation or un-ruptured) or may present with the triad of amenorrhea, lower abdominal pains and bleeding per vagina. Clinical examination of a woman with suspected ectopic pregnancy will reveal lower abdominal tenderness with guarding and rebound tenderness. Tenderness maybe located on the ipsilateral side of the ectopic or within the suprapubic region or rarely in the contra lateral region of the lower abdomen. She may even present in a state of shock resulting from severe hemorrhage within the intra-abdominal cavity. In women of reproductive age, a high index of suspicion is required to diagnose ectopic pregnancy in order to prevent unwarranted maternal morbidity and mortality and ectopic should be considered in any patient with lower abdominal pain and vaginal bleeding when intra uterine pregnancy has not been established.<sup>7</sup>

The management of ectopic pregnancy will be either Expectant, Medical or Surgical. Any of these management option should be individualized taking into cognizance the clinical presentation of the patient, (whether or not the ectopic is ruptured), the hemodynamic status of the patient, the reproductive desires of the patient and the decision of the patient after informed counselling.

Expectant management requires no intervention with serial monitoring of the Beta HCG. Medical management involves the use of methotrexate (or other medical agents) while surgical management maybe laparoscopy or laparotomy and could either be - salpingectomy, salpingotomy, salpingostomy or tubal segmental resection. Surgical management of ectopic may also require a wedge resection of the uterus.

We present a case of a multiparous woman with multiple uterine fibroids who had no identifiable risk factor for ectopic pregnancy and in whom the gestational sac with the embryo intact was extruded into the peritoneal cavity following a left ruptured ectopic pregnancy.

## CASE REPORT

A 40-year-old Para 5+0 5A lady whose Last Menstrual Period (LMP) was on the 1<sup>st</sup> of August 2025. Her LMP was said to have lasted two days unlike the menstruation of the preceding months that had been lasting between seven days and nine days. She presented first at the gynecology clinic on 17<sup>th</sup> August 2025 on account of progressively increasing lower abdominal mass and heavy menstrual bleeding both of 5 months prior to presentation. Clinical examination revealed a young lady, not in any obvious distress, not pale and anicteric. Systemic examination revealed elevated blood pressure of 160/100mmhg and an abdominal mass that was about 20 weeks size, non-tender, not attached to the underling skin and multi nodular, could get above the mass but not below it. There was no

demonstrable ascites. Pelvic examination revealed normal adult female external genitalia and speculum examination revealed a healthy-looking cervix and vaginal walls. Digital vaginal examination revealed a cervix that was central, about 3cm long and there was no demonstrable cervical excitation tenderness and on moving the cervix, the mass moved with it. Both adnexa were free and non-tender, and pouch of Douglas was unremarkable. The clinical assessment was Symptomatic uterine fibroid in a multipara. An Abdomino-pelvic ultrasound scan that was requested revealed essentially normal abdominal viscera with the uterus that was anteverted, bulky and non-gravid with heterogeneous masses within its walls. An impression of multiple uterine myoma was made. She was counselled for abdominal hysterectomy and referred to the medical unit for blood pressure control in view of her newly diagnosed hypertension and to be seen in a fortnight for surgical preparation.

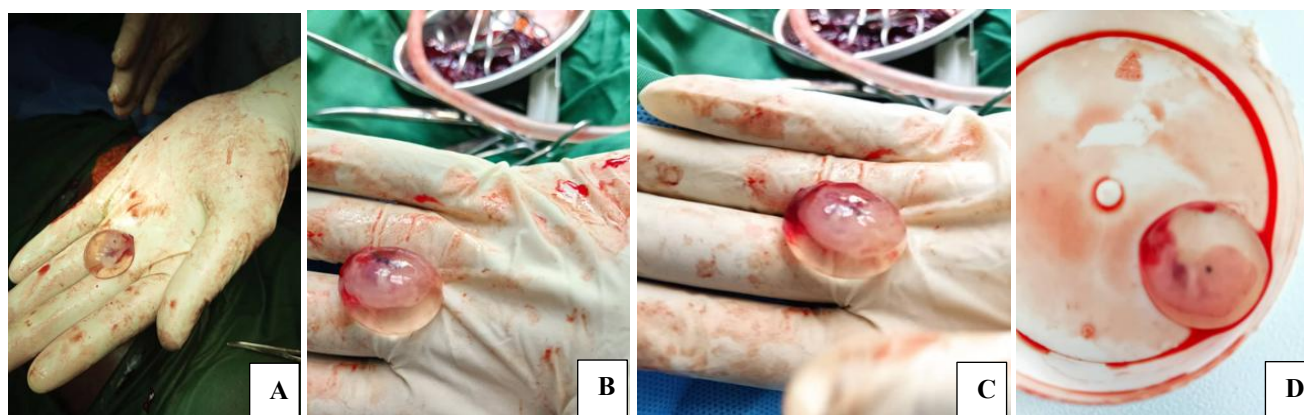
However, she re-presented at the hospital's Gynaecology Emergency on the 26<sup>th</sup> of August 2025 with history of weakness and dizziness and clinical examination revealed she was pale. An urgent packed cell volume done was 22% and she was admitted for stabilization to be transfused with two units of blood. While on admission for the blood transfusions she developed a mild blood transfusion reaction to the blood and on 5<sup>th</sup> September 2025, she developed sudden onset of lower abdominal pains and went into shock.<sup>8</sup> Clinical examination revealed a young lady, pale, sweating with unrecordable pulse rate and a blood pressure of 80/30mmhg. Respiratory rate was 38 cycles per minute with SPO2 in room air of 78%. Abdominal examination revealed findings in keeping with earlier abdominal examination however in addition, there was generalized pain all over the lower abdomen with guarding and rebound tenderness. A digital vaginal examination revealed a cervix that was 3cm long, central and a closed cervical os with marked tenderness on the left adnexa and positive cervical motion tenderness. A clinical assessment of a ruptured ectopic pregnancy was made; this was corroborated by a bedside positive pregnancy test.<sup>9</sup>

She was informed and written consent was obtained for emergency exploratory laparotomy and immediate resuscitation commenced; a central line was passed a blood samples collected for urgent packed cell volume, to group and cross match four units of blood, viral markers and a bedside urinalysis and she received Iso plasma stat and was placed on intra nasal Oxygen at 6 ltrs/min and urethral catheter was passed. Anesthetist was informed and she was immediately wheeled into the operating theatre. Results of pre-operative investigation were: Packed Cell Volume of 18%, all viral markers were non-reactive, and urinalysis was essentially normal.

The intra operative findings were: Haemoperitoneum of about 800 ml, left ruptured ampullary gestation, uterus harbored multiple intramural fibroids, with grossly normal right fallopian tube and bilaterally grossly normal ovaries. Gestational sac with grossly normal embryo extruded into

the peritoneal cavity was recovered intact (Figure 1). No endometriosis was visualized, no evidence of pelvic adhesions and estimated blood loss was approximately 400 ml, total blood loss 1200 ml. She received two units of

blood intra operative and a third unit was transfused in the ward. She remained stable and was discharged on the seventh postoperative day, with instructions to follow up in the gynaecology clinic after two weeks.



**Figure 1 (A-D): Intraoperative images showing the intact gestational sac containing the normal embryo, extruded into the peritoneal cavity following rupture of the left ampullary ectopic pregnancy.**

## DISCUSSION

Ectopic pregnancy occurs in 1% to 2% of all pregnancies and it is a recognized cause of maternal morbidity and mortality and has remained a reproductive health challenge to Nigerian women as well as a threat to efforts in achieving the United Nations sustainable development Goal 3 in sub-Saharan Africa.<sup>10,11</sup> The commonly encountered risk factors for ectopic pregnancies including, cigarette smoking, Pelvic Inflammatory Disease from multiple sexual partners, prior pelvic surgery, prior tubal surgery, in utero exposure to DES, IUD use were all absent in this index patient, thus prompting conclusion that uterine fibroids could be responsible for the aetiology of the ectopic pregnancy.<sup>5</sup> Uterine fibroids alter the anatomic structure and physiological functions of the uterus and may lead to implantation of the fertilized ovum outside the uterus. In this index patient, the implantation of the fertilized ovum was seen in the left fallopian tube while the embryo within the sac was extruded outside into the peritoneal cavity (Figure 1).

While Ultrasound scan remains a very useful investigative modality in the diagnosis of ectopic pregnancy as doctors can diagnose an ectopic pregnancy when an ultrasound scan reveals the gestational sac or embryo outside of the uterus.<sup>12</sup> In the index patient, the ultrasound scan missed the ectopic pregnancy because of the earlier age of gestation and at first clinic visit she presented with symptoms completely unrelated to the ectopic but more in tandem with symptomatic uterine fibroids. The diagnosis of ectopic pregnancy requires a high index of suspicion from clinicians, and this was what came to bear in this patient as this is a woman of reproductive age who lapsed into sudden shock. Shock occurring in ectopic pregnancy

is not uncommon and is due to a rupture of the gestational sac inside the fallopian tube with resultant bleeding into the peritoneal cavity. Ectopic pregnancy is a major health problem in women of reproductive age. Patients present acutely and haemodynamically unstable. Laparotomy for salpingectomy is the mainstay of treatment.<sup>13</sup> The index patient had a left ruptured ampullary gestation with haemoperitoneum of about 800 ml. With bleeding into the peritoneal cavity, there is resulting peritonitis and lower abdominal pains.

Management of any patient with suspected ruptured ectopic pregnancy will require immediate resuscitation and emergency exploratory laparotomy. Intra operative management will be guided by the findings intra-op and reproductive desires of the woman following pre-operative counselling.

## CONCLUSION

Ectopic pregnancy remains a leading cause of maternal morbidity and mortality. In addition to the already known risk factors for this condition, it behooves clinicians to consider existing multiple uterine fibroids as a possible risk factor in patients presenting with the triad of amenorrhea, lower abdominal pain, and vaginal bleeding, in whom no known risk factor is otherwise identified.

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## REFERENCES

1. Puttaraju CM, Prasad NN, Sailakshmi MPA. A clinical study of trends of ectopic pregnancy and its

- management in a tertiary care hospital. *Int J Reprod Contracept Obstet Gynecol.* 2019;8(12):4834-41.
2. Ilikannu SO, Dunsin TO, Jombo SE, Agadaga DI, Onyeoji CP, Uwuigbe AO. Abdominal ectopic pregnancy still a diagnostic dilemma: a case report. *Int J Clin Diagn Pathol.* 2021;4(4 Pt A):1-3.
  3. Ononuju CN, Ogbe AE, Changkat LL, Okwaraoha BO, Chinaka UE. Ectopic pregnancy in Dalhatu Araf Specialist Hospital Lafia Nigeria - A 5-year review. *Niger Postgrad Med J.* 2019;26(4):235-8.
  4. Backman T, Rauramo I, Huhtala S, Koskenvuo M. Pregnancy during the use of levonorgestrel intrauterine system. *Am J Obstet Gynecol.* 2004;190(1):50-4.
  5. Hwang A, Chou L, Islam MM, Li YC, Syed-Abdul S. Risk factors for ectopic pregnancy in the Taiwanese population: a retrospective observational study. *Arch Gynecol Obstet.* 2016;294(4):779-83.
  6. Panelli DM, Philips CH, Brady PC. Incidence, diagnosis and management of tubal and nontubal ectopic pregnancies: a review. *Fertil Res Pract.* 2015;1:15.
  7. Crochet JR, Bastian LA, Chireau MV. Does this woman have an ectopic pregnancy? The rational clinical examination systematic review. *JAMA.* 2013;309(16):1722-9.
  8. Kalinski MA, Guss DA. Hemorrhagic shock from a ruptured ectopic pregnancy in a patient with a negative urine pregnancy test result. *Ann Emerg Med.* 2002;40(1):102-5.
  9. Newbatt E, Beckles Z, Ullman R, Lumsden MA; Guideline Development Group. Ectopic pregnancy and miscarriage: summary of NICE guidance. *BMJ.* 2012;345:e8136.
  10. Wang YL, Weng SS, Huang WC, Su TH. Laparoscopic management of Ectopic Pregnancy in unusual location. *Taiwanese Journal of Obstetrics and Gynaecology.* 2014;53(4):466-70.
  11. Okoror CEM, Uhunmwangho BO, Idemudia O. Ectopic pregnancy at a teaching hospital, Nigeria: an analysis of presentation and risk factors. *Menoufia Med J.* 2020;33(2):415-8.
  12. American College of Obstetricians and Gynecologists' Committee on Practice Bulletins-Gynecology. ACOG Practice Bulletin No. 193: Tubal Ectopic Pregnancy. *Obstet Gynecol.* 2018;131(3):e91-103.
  13. Akaba GO, Agida TE, Onafowokan O. Ectopic pregnancy in Nigeria's federal capital territory: a six-year review. *Niger J Med.* 2012;21(2):241-5.

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