

## **Case study**

# **CASE REPORT ON ECTOPIC PREGNANCY WITH SEPTICMIA**

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### **Abstract:**

### **Introduction**

Ectopic pregnancy is a **complication of pregnancy** in which the embryo implants outside the uterus. Abdominal discomfort and vaginal bleeding are common signs and symptoms, but only around half of the women who are affected experience both. The discomfort can be severe, dull, or crampy. If there is bleeding into the **abdomen**, pain may **radiate** to the shoulder. A rapid heart rate, fainting, or shock may occur as a result of severe bleeding. The fetus, with a few exceptions, is unable to live. Obstetricians and gynaecologists face a number of obstacles when dealing with emergencies in Jehovah's Witnesses.

**Main symptoms and/or important clinical findings:** She is a 20-year-old woman who had an emergency diagnostic laparotomy for a ruptured ectopic pregnancy with pyosalpinx and septicemia on February 14, 2021. Her diagnostic Ultrasonography has been completed. A complete blood investigation has been completed. She was moderately symptomatic before 8 days, when she was primigravida with 2 months of pregnancy, and then she got **abdomen** cramps that worsened with time.

**The main diagnoses, therapeutic interventions, and outcomes:** She is a 20-year-old woman who had a post-surgical case of Explore Laparotomy For Ruptured Ectopic Pregnancy with pyosalpinx and septicemia, as well as acute abdominal pain. Her treatment began on the day of admission with IV fluids, antibiotics, and injectables. Started, advised for Zonac suppository PR, and finished all necessary research.

**Nursing Perspectives:** laboratory techniques are urgently required. In order to limit the development of treatments to enhance the outcome.

**Conclusion:** Although it is rare for an ectopic pregnancy to go past the first trimester, it does happen. Thus, it is necessary to rule out ruptured ectopic pregnancy in all cases of surgical abdominal urgency during pregnancy, as it is life-threatening to the mother if proper diagnosis and care are delayed. Despite the fact that early intervention saves lives and

minimizes morbidity, ectopic pregnancy still accounts for 4 to 10% of all pregnancy-related deaths and is associated with a high rate of ectopic site gestations in subsequent pregnancies.

**Keyword:** Ectopic pregnancy, Ruptured ectopic pregnancy, Hemoperitoneum

## Introduction

Ectopic pregnancy is a pregnancy in which the developing blastocyst implants outside the endometrial cavity [1]. Extrauterine pregnancy is estimated to account for 1.3% to 2.4% of all pregnancies [2]. 90% of ectopic pregnancies occur in the fallopian tubes, and the remaining implant on the cervix, the ovary, the myometrium, and other sites [3]. Ectopic pregnancy may present as abdominal or pelvic pain, amenorrhea with or without vaginal bleeding in the first trimester.<sup>1</sup>

The minimum diagnostic requirement for an ectopic pregnancy is a transvaginal ultrasound and serological confirmation of pregnancy [4]. Pregnancies that implant on the uterus a cralligament are, and only a few other cases have been described in the literature. The incidence of these pregnancies ranges from 1 per 10,000 pregnancies to 1 per 30,000 pregnancies and approximately 1 per 100 ectopic pregnancies. These pregnancies present similar to tubal ectopic pregnancies and can be difficult to distinguish through Ultrasonography; they can also be life threatening if not managed in a timely fashion. Here, we describe a case of ruptured ectopic pregnancy in the left uterus acralligament in a patient with potential risk factors including possible endometriosis and recently stereoscopic procedure. Surgical intervention was used to help manage the pregnancy. The pathogenesis of this disease and the appropriate management strategies require descriptions of such cases. In addition, we look at other cases of ectopic pregnancies within the uterosacral ligament to learn more about the risk factors and treatment options for these pregnancies.<sup>2</sup>

## Patient Information:

A 20 yrs old female with post surgical case of explore laparotomy for damaged ectopic pregnancy, admitted on date 16/02/2020 for further treatment.

## Primary concerns and symptoms of the patient

A 20 yrs old female with post operative case of explore laparotomy for ruptured ectopic pregnancy reffered I/V/O hypotension for further management patient complaint severe abdominal pain, pyosalpinx with septicemia fluctuating BP.TPR/BP/charting , I/O charting ,

AG charting , advice O<sub>2</sub> 4 lit I/V Fluids & antibiotic treatment started, abdominal drain charting

### **Medical, family, and psycho-social history:**

Patient was relatively asymptomatic before 8 days. She is primigravida with 2 months of gestation. Then she starts to have **abdomen** pain that has become worse during time. She visited many doctors, but no definitive diagnosis was made then at Kinwat on 14 february diagnosis of ectopic pregnancy was made & was reffered to Adilabad. There Emergency laparotomy was performed with diagnosis of ruputured ectopic pregnancy with pyosalpinx with septicemia , two point blood transfusion one intra operative one in post operativethenfluctuating her BP they rffered to higher center at AVBRH with modrate general condition . There was no history of bladder and bowel symptoms.no any significant family history ,She is housewife .

**Relevant past interventions with outcomes:**Not reported

### **CLINICAL FINDINGS:**

#### **Significant physical examination (PE) and important clinical findings.**

On general examination patient was conscious, oriented and there is associated high-risk factors. All blood investigation done in that Wbc Count is 19400 Total Plattelet Count -3.23 KFT- Sodium- 137, Pottasium -5.2. ,LFT- Globulin calcuited Parameter- 3.1., Injectable Treatment was started.

#### **Timeline:**

The patient was asymptomatic before 8 days. She is primigravida with 2 months of gestation. She experienced a **abdomen** cramp that was becoming worse, but no positive diagnosis of ectopic pregnancy was made, so an emergency investigative laparotomy was performed for a ruptured ectopic pregnancy with pyosalpinx & septicemia.

### **HISTORICAL AND CURRENT INFORMATION FROM THIS EPISODE OF CARE**

#### **ORGANIZED AS A TIMELINE**

Medication started for pyosalpinx with septicemia on the day of admission 1- day IV fluids, injectables & closed monitored of general condition of patient, 2-day BP is normal, 3 day general condition is satisfactory.

## **Diagnostic Assessment**

Abdominal examination done & All blood investigation done, Complete Hemogramme and Urine tests were done. Diagnostic challenges -No Diagnostic Challenges were faced.

**Prognosis:** Her prognosis is good to fair.

## **THERAPEUTIC INTERVENTION:**

In the present case study she received I V fluids, Injectables. Meropenem 1gm, Inj. Metro, Inj. Pan-40mg, Inj. Tramadol in IV Fluid, Inj. Paracetamol 500mg advice for Zonac suppository PR. All important and total blood diagnostic evaluation done. TPR charting, I/O charting, abdominal drain charting, and a liquid diet are all therapeutic intervention recommendations.

### **Changes in therapeutic intervention (with rationale):**

No challenges were reported in therapeutic intervention.

Follow-up and Outcomes: In spite of all care patient progresses good, She was given discharge on the 7th day. A. She was advised to strictly avoid heavy work. Advised to take complete bed rest.

### **Important follow-up diagnostic and other test results:**

To avoid lifting heavy weight, to prevent constipation and controlled coughing.

### **Intervention adherence and tolerability (How was this assessed?)**

Intervention was well adhered and well tolerated by patient.

**Adverse and unanticipated events:** No adverse events were noted.

## **DISCUSSION**

### **A scientific discussion of the strengths AND limitations associated with this case report**

Ectopic pregnancy is a common issue in the first trimester of pregnancy. It is a potentially life-threatening syndrome that continues to be regarded as a leading cause of maternal mortality, accounting for 9 % to 13% of all pregnancy-related deaths[7] . The vast majority of ectopic pregnancies implant in various parts of the fallopian tube, with the ampulla (70%) being the most common, followed by the isthmus (12%), fimbria (11.1%), and interstitium (2.4%) [8]. Previous ectopic pregnancy, tubal injury or adhesions from pelvic infection or past abdomino-pelvic surgery, history of infertility, IVF therapy, higher maternal age, and

smoking are all risk factors for ectopic pregnancy. Half of the women who have ectopic pregnancies, on the other hand, have no known risk factors [9]. The lack of a submucosal layer within the fallopian tube wall allows ovum implantation within the muscular wall, allowing the quickly multiplying trophoblasts to erode the muscularis layer, resulting in tubal pregnancy symptoms in the first trimester. Tubal rupture, which results in bleeding and shock, usually occurs at 7.2 weeks 2.2. In the literature, however, there have been examples of advanced gestational age with a variety of appearances. The fallopian tube seldom dilates to the extent where it can accommodate a foetus in the second or third trimester [10]. In an emergency room setting, ectopic pregnancy is still a difficult diagnosis to make. As a result, in a patient with a suspected ectopic pregnancy, a biochemical investigation (BhCG) and a skillful sonographic evaluation of the pelvis play a critical role in expediting patient management. 3 The optimum treatment approach is determined by a number of parameters, including the patient's hemodynamic stability, BhCG level, gestational sac size, and desire for future fertility. Systemic methotrexate can be used to treat single ectopic pregnancies that have not ruptured [12]. In our case, an emergency laparotomy and right salpingectomy were required due to a ruptured ectopic mass, the patient's unstable hemodynamic status, and the accumulation of a substantial amount of intra-abdominal blood shown on ultrasound. Primary peritoneal pregnancy is a gynecologic complication that is uncommon. According to the literature, the incidence has ranged from 1 in 10,000 to 1 in 30,000 pregnancies, with an average of 1 in 100 ectopic pregnancies [13, 14]. The patient's risks are similar to those of a ruptured tubal pregnancy, although early detection is difficult<sup>4</sup>.

A primary peritoneal pregnancy must meet the following criteria, according to Studdiford: both fallopian tubes and ovaries must appear normal without evidence of rupture or injury, there must be no uteroperitoneal fistula, and the pregnancy must be limited to the peritoneal surface and occur early enough to prevent secondary implantation. [15]. The ultrasound was unclear because no gestational sac, yolk sac, or foetal pole could be detected. In the case of a ruptured ectopic pregnancy, an adnexal mass in the presence of a positive pregnancy test and acute abdominal signs was alarming. Primary peritoneal pregnancies can result in life-threatening complications such as intraperitoneal hemorrhage requiring a blood transfusion or even death. It's critical for gynecologic surgeons to understand that an Ultrasonography isn't always accurate in detecting a peritoneal pregnancy. When a patient has a hemoperitoneum after a positive pregnancy test, there should be a high index of suspicion for either a ruptured tubal or abdominal pregnancy, and immediate laparoscopy is critical to minimising

morbidity. When an ectopic pregnancy is suspected and laparoscopy is performed, a complete pelvic and abdominal survey is required to find the pregnancy implantation site.<sup>5</sup>**Discussion of the relevant medical literature:**

A 28-year-old G2P0010 patient was described as having a ruptured ectopic pregnancy within the uterosacral ligament, which was medically removed via laparotomy. There were no obvious risk factors in this case [16]. The first case was a 33-year-old female G1P0 with a history of pelvic endometriosis who had a ruptured ectopic pregnancy within the uterosacral ligament [17]. The second case was a 33-year-old female G1P0 with a history of pelvic endometriosis who had a ruptured ectopic pregnancy within the uterosacral ligament. Laparoscopy was used to manage her procedure, which was later modified to a laparotomy [17]. The second instance was a 32-year-old G4P2 who presented with a similar symptomatology but had no risk factors and was treated with laparoscopic excision of aberrant tissue [17]. Gundabattula and Pochiraju documented a 30-year-old G3P1A0L1 who had a ruptured ectopic pregnancy within the uterosacral ligament that was treated with laparoscopy and one dose of parenteral methotrexate 50 mg/m<sup>2</sup>. After one week, her beta-hCG levels had dropped significantly (from 5699 mIU/mL to 81 mIU/mL) [18]. The pathophysiology of pregnancies that implant on the uterosacral ligament involves sperm accumulating in the posterior cul-de-sac and ovum accumulating in the same area due to physiologic peritoneal fluid flow [19, 20]. Hysteroscopy has not been previously described as a potential or confirmed risk factor for uterosacral ligament ectopic pregnancies, and it is remarkable that our case had this operation just one month prior to presentation. It's likely that the hysteroscopic fluid helped maintain fallopian tube patency, allowing sperm and ovum to meet in the peritoneum and implant in the uterosacral ligament, which could be a risk factor. On the contrary, it's worth thinking about whether the hysteroscopic fluid aided the passage of an early tubal pregnancy into the peritoneum. Prior to her hysteroscopy operation, the patient's urine beta-hCG was negative, indicating that pregnancy was unlikely at the time. We also believe our case satisfies Studdiford's criteria and was a primary peritoneal pregnancy, as previously stated.<sup>6</sup>

The patient's urine beta-hCG was negative prior to her hysteroscopy surgery, indicating that pregnancy was unlikely at the time. We also believe that our case meets Studdiford's criteria and that it was a primary peritoneal pregnancy, as indicated previously.<sup>7</sup>

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## Conclusion

Ectopic pregnancies should be detected early and the aetiology of the presentation determined. An ectopic pregnancy can occur in places other than the uterus, such as the cervix, ovary, abdomen, liver, spleen, or caesarean section scar [24]. Early intervention saves lives and reduces morbidity today, but ectopic pregnancy still kills 4 to 10% of pregnant women and leads to a high rate of ectopic site gestations in following pregnancies [25]. Medical management has emerged as a viable alternative to surgery for maintaining future fertility [26]. Surgery is still a viable and sometimes necessary therapy option for ectopic pregnancy [27]. Counseling and collaborative decision-making are vital with these patients, as they require a lot of attention and comprehension of the future dangers of such pregnancies. A well-considered and strategic management path can make all the difference in achieving a positive conclusion.

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