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## Case Report on Post Operative Case of Exploratory Laparotomy for Ruptured Ectopic Pregnancy with Septicemia

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#### Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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Case Study

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### **ABSTRACT**

**Introduction:** Extra uterine pregnancy is a first-trimester pregnancy problem that affects 1.3–2.4 percent of all pregnancies. The key signs of the ectopic pregnancy are abdominal discomfort and vaginal bleeding along with Sharp, dull, or cramping pains may be experienced around 50% of the women who are suffering from ectopic pregnancy. The neglected ectopic pregnancy may results in the fallopian tube can burst, internal abdominal bleeding, shock, and serious blood loss and later complication is septicemia. As a health care professional it's very important to manage certain complication with medical and surgical management.

Main Symptoms and/or Important Clinical Findings: A 20 years old female with post operative case of Exploratory Laparotomy admitted in A.V.B.R.H. on 14/02/2021.with chief complaints of the after undergone certain investigation she has diagnosed as Exploratory Laparotomy with septicemia as post-op complication.

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**The Main Diagnoses, Therapeutic Interventions, and Outcomes:** A 20 years old female with post-operative Exploratory Laparotomy for Ruptured Ectopic Pregnancy operated case with septicemia, with chief complaints of acute abdominal pain, and vaginal bleeding the doctors manage her initially with I.V. fluids, antibiotics, Zonac suppository and adequate nursing management.

**Nursing Perspectives:** The nursing interventions initiated for managing present case are fluid replacement therapy, monitoring vital sign per hourly, monitoring the CBC reports and other investigations like USG abdomen, blood glucose levels. Maintained TPR Chart, I/O Charting, abdominal girth charting.

**Conclusion:** In the Present case the patient of A 20 year old female with post operative exploratory laparotomy for ruptured ectopic pregnancy with septicemia it has been managed with the therapeutic and surgical treatment ,right now the patient condition then patient has discharged on dated 22/2/21.

Keywords: Ruptured ectopic pregnancy; exploratory laparotomy; septicemia.

#### 1. INTRODUCTION

When a woman conceives outside of uterus specially fallopian tubes, it is known as ectopic pregnancy growing blastocyst implants outside of the endometrial cavity [1] Extra uterine pregnancy accounts for 1.3 percent to 2.4 percent of all pregnancies, according to estimates [2]. Fallopian tubes account for 90% of pregnancies. with the remainder implanting in the cervix, ovary, myometrium, and other places [3]. Pregnancies involving the uterosacral ligament are uncommon, with only a few other occurrences reported in the literature [4]. These pregnancies occur at a rate of 1 in 10,000 to 1 in 30,000 pregnancies, with about 1 in 100 ectopic pregnancies. In the first trimester, ectopic pregnancy can cause stomach or pelvic pain, as well as amenorrhea and vaginal bleeding. A transvaginal ultrasound and a vaginal examination pregnancy confirmation by serology are the minimum diagnostic requirements [5] for an ectopic pregnancy. These pregnancies have symptoms that are similar to tubal ectopic pregnancies and are difficult to diagnose with Ultrasonography; it could be fatal. The present case a patient with a ruptured ectopic pregnancy in the left uterosacral ligament, endometriosis and a recent hysteroscopic operation as potential risk factors. Surgical intervention was used to manage the pregnancy. In order to understand the biology of this disease and the best management strategies, descriptions of such cases are required. We also look at additional cases of ectopic pregnancies within uterosacral ligament to learn more about the risk factors and treatment options for this type of pregnancies [6].

#### 2. PATIENT INFORMATION

#### 2.1 Demographic Details

A 20 yrs old female with post operative case of exploratory laparotomy, admitted in A.V.B.R.Hospital on date 16/02/2020 for further treatment. With the chief complaints of the severe abdominal pain she has undergone certain investigations like USG Abdomen Complete blood count. And diagnosed as a case of exploratory laparotomy with septicemia.

# 2.1.1Primary concerns and symptoms of the patient

A 20 yrs old female with post operative case of exploratory laparotomy for ruptured ectopic pregnancy with septicemia, complaints of severe abdominal pain in lower abdomen.

# 2.1.2 Medical, family, and psycho-social history

Patient was relatively asymptomatic before 8 days . She is primigravida with 2 months of gestation. Then she developed pain in abdomen which was increasing in intensity with passing time she visited many doctors, but no definitive diagnosis was made then at Kinwat on 14 February diagnosis of ectopic pregnancy was made & was referred to Adilabad. There Emergency laparotomy was performed with diagnosis of ruptured ectopic pregnancy with septicemia, two point blood transfusion one intra operative one in post operative then fluctuating her BP they referred to higher center at AVBRH with moderate general condition. There was no history of bladder and bowel symptoms.

### 2.2 Family History

Patients belongs to middle class family and nuclear family her annual income is 25,000 per month. No any significant family history.

#### 2.2.1 Habits

No any of the patient does not have any unhealthy health habits.

#### 2.2.2 Psycho-social history

She is housewife. Patient is social by nature.

# 2.2.3Relevant past interventions with outcomes

Not reported.

#### 3. RESULTS IN THE CLINICAL SETTING

Significant physical examination (PE) and important clinical findings.

Physical examination

On general examination patient was conscious, oriented and there is associated high-risk factors.and swelling on the legs, and abdominal girth is normal.

### 3.1 Clinical Findings

All blood investigation done in that WBC Count is 19400 Total Platelet Count -3.23 KFT- Sodium-137, Potassium -5.2., LFT- Globulin calculated Parameter- 3.1., Injectables Treatment was started. Ultrasongraphy done.

#### 3.2 Timeline

The patient was a symptomatic before 8 days she is primigravida with 2 months of gestation. She developed pain in abdomen which was increasing in intensity but no definitive diagnosis was made then at the government hospital of Kinwat on 14 February she diagnose as a case of ectopic pregnancy it was decided to referred to higher health care center to Adilabad . At Adilabad hospital emergency laparotomy is a surgical procedure that removes the intestine was performed with diagnosis of ruptured ectopic pregnancy. During surgical correction she has received two bags of blood transfusion one intra operative one in post operative still her BP was fluctuating so that they referred to higher center at AVBRH with moderate general condition.

### 3.3 Diagnostic Methods

All blood investigation done in that WBC Count is 19400 Total Platelet Count -3.23 KFT- Sodium-137, Potassium -5.2., LFT- Globulin calculated Parameter- 3.1., Injectables Treatment was started. Ultrasongraphy done.

Complete Hemogramme and Urine tests were done.

Diagnostic challenges -No Diagnostic Challenges were faced.

### 3.4 Prognosis

Her prognosis is good.

### 3.5 Therapeutic Intervention

In the present case she has received I V fluids, like normal saline, dextrose 5%, and ringer lactate to maintain the electrolyte balance of the patient. Inj .Meropenem-1 gm, twice a day with sensitivity test Inj. It's a broad spectrum antibiotic. Inj. Metrogyl 100ml thrice a day ,Inj. Pan-40mg twice a day act as a proton pump inhibitor, Inj. Tramdol 50 mg IV twice a day diluted with IV Fluid act as a analgesic, Inj. Pause -500mg IM Twice a day act as a anticoagulant also advice for Zonac suppository Per rectal for maintaining body temperature Therapeutic intervention advice for Charting, I/O Charting, abdominal drain charting . After operation on 2<sup>nd</sup> day allow to liquid diet.

# 3.5.1Changes in therapeutic intervention (with rationale)

No changes were reported in the context of therapeutic intervention.

### 3.5.2 Follow-up and outcomes

In-spite of all care patient progress good, she was given discharge on the 7th day. A. She was advised to strictly avoid heavy work. Advised to take complete bed rest. Advised to avoid lifting heavy weight, to prevent constipation and controlled coughing.

# 3.5.3Adherence to the intervention and tolerability (How was this determined)

Intervention was well adhered and well tolerated by patient.

**Unexpected and unfavorable events**: No adverse events were noted.

#### 4. DISCUSSION

# 4.1 A Scientific Evaluation of the Case Report's Merits and Shortcomings

An ectopic pregnancy affects all women of childbearing age visitor a general practitioner a hospital emergency room at a lesser cost abdomen and/ or vaginal bleeding. Ectopic pregnancy is a common problem in the first trimester of pregnancy of pregnancy. It is a life-threatening syndrome continues to be considered to be leading causes of maternal death accounting for nine percent to Pregnancy-related mortality account for 13% of all deaths [7]. The majority of ectopic pregnancies implant in various parts of the fallopian tube, the most frequent of which is the ampulla. (70 %), Then there's the isthmus (12%), fimbria (11.1%) is a type of fimbria, as well as the interstitial (2.4%). Many risk factors are linked to ectopic previous includina pregnancy. pregnancy, tubal damage, and adhesion from a previous ectopic pregnancy. A Infection in the or past, Abdomino-pelvic surgery (abdominal-pelvic surgery) is a procedure infertility, the past IVF treatment, Smoking and mother age are both factors to consider hazard factors. Half of the women who have ectopic pregnancies, on the other hand, haven't aware about hazard factor,[8]Tubal pregnancy is a type pregnancy in which the is commonly symptomatic The fallopian tube wall lacks a submucosal layer. Allows ovum implantation within the muscular wall, allowing the quickly expanding trophoblast shred the layer of muscular is in the first trimester of pregnancy tuberculous rupture At 7.2 weeks, it generally happens. 2.2weeks, which causes bleeding, and shock. However there have been cases of advanced gestational with age various demonstrations recorded in the body knowledge As an example, occurrences are uncommon because the fallopian tube seldom dilates to the degree of supporting a fetus in the third or second trimester [9]. Ectopic pregnancy is a term used to describe a pregnancy. In an emergency room situation, it's still a difficult diagnosis to make. A biochemical investigation (B-HCG) and an ultrasound are performed on a patient with a probable ectopic pregnancy. A skillful A pelvic sonogram is used to assess the condition of the pelvis, play a critical role in speeding the therapy of the condition [10]. The

optimum treatment choice is determined by a number of parameters as well as the patient's hemodynamic stability, B-HCG level, and other factors gestational sac dimensions, and the patient's goal for future fertility Systemic Methotrexate can be used to treat unruptured single ectopic pregnancies [2]. The ruptured ectopic mass, the patient's unsteady hemodynamic status, and the large amount of intra-abdominal blood seen on ultrasound image necessitated an emergency laparotomy and right salpingectomy in our case. Primary peritoneal pregnancy is a rather uncommon gynecologic complication. According to the literature, the incidence has ranged from 1 per 10,000 to 1 per 30,000 pregnancies; with an average of 1 per 100 ectopic pregnancies.[11] the dangers are comparable to the patient to those of a tubal pregnancy rupture although early detection is difficult[12].

A primary peritoneal pregnancy is a pregnancy that implanted directly in the peritoneum Must fulfill what follows requirements, according to Studdiford: Both the fallopian tubes and the ovaries are involved must be normal without evidence of rupture or injury, there must be no uteroperitoneal fistula, and there must be no The existence of a pregnancy and a uteroperitoneal fistula limited to the peritoneal surface and detected enough time to rule out secondary implantation [13]. The ultrasound was unclear because no volk sac, a gestational sac, or a foetal a pole could be detected. The combination of a positive pregnancy test and acute stomach symptoms was concerning, of an emergency, ruptured ectopic, expecting a child a mass in the adnexa positive pregnancy test and acute stomach symptoms was concerning. Primary peritoneal pregnancies can result in lifethreatening complications such as intraperitoneal hemorrhage requiring a blood transfusion or even death is possible. It's a critical surgeons specialising in gynaecology to understand that an Ultrasonography isn't always accurate detecting a peritoneal pregnancy When a patient has a Hemoperitoneum, he or she is said to have a Hemoperitoneum. And a positive pregnancy test, for either, there should be a strong level of suspicion. a tubal or abdominal pregnancy that has ruptured, and immediate laparoscopy is critical to reducing morbidity. In addition, when ectopic pregnancy is suspected laparoscopy is performed, a comprehensive pelvic and abdominal exam is required to find the pregnancy implantation site[14].

# 4.2 Discussion of the Relevant Medical Literature

G2P0010 sufferer, 28 years old was described as having a ruptured ectopic pregnancy within the uterosacral ligament, which had been medically Laparotomy, was used to remove the obstruction in the intestine. There were no obvious risk factors in this patient's case [15]. The first case, described by Lo and Lau, involved a 33-year-old woman. An Ectopic pregnancy that has burst within. In a human, the uterosacral ligament is a ligament that extend posterior from the uterine cervix to sacrum, Female G1P0 with of pelvic endometriosis Laparoscopy was used to manage her surgery, which was later converted to a laparotomy. G4P2 32 years of experience a demonstration and no hazard factors was treated with the use of laparoscopic surgery in the second case. tissue that is abnormal Pochiraju and Gundabattula presented a 30-year-old G3P1 who had a ectopic pregnancy burst within the uterosacral ligament that had been treated with the use of laparoscopy and a single a dosage of parenteral methotrexate a concentration of 50 mg/m2 After a week, her beta-HCG levels were normal. levels had dropped significantly(from 5699 to 81 micrograms per millilitre)[17]. Sperm is involved in the Pathophysiology of pregnancies that implant on the uterosacral ligament. Accumulating cul-de-sac and ovum in the back accumulating exactly the same location because of normal peritoneal fluid flow [18]. Hysteroscopy has not been proven to be effective, been previously recorded as a possible or confirmed It's remarkable that our case has a risk factor for uterosacral ligament ectopic pregnancies. had this is operation only a month before the presentation It's as likely that the fluid in the uterus is hysteroscopic helped maintain fallopian tube patency, allowing In the peritoneum, sperm and ovum encounter and implant in the uterosacral ligament, which could, be a source of danger Quite the contrary, it's worth thinking about whether the hysteroscopic fluid aided the passage enters the peritoneum of an early tubal pregnancy Beta-HCG levels in the patient's urine level Prior to her hysteroscopic operation, she was negative indicating that At the time, unlikely pregnancy seemed the Furthermore, We are confident in our position satisfies. It was a primary peritoneal pregnancy, according to Studdiford criteria as previously mentioned [19]. In the uterosacral ligament, there are pregnancies are managed differently based depending on the patient's health, gestational

age, and other factors ectopic size, as well as the surgeon's experience.[15] and Treatment of abdominal pregnancies with Methotrexate and/or potassium chloride intracardiac injections have also been used[20].

#### 5. CONCLUSION

Present case the patient of 20 year old female with post operative case exploratory laparotomy for ruptured ectopic pregnancy with septicemia and ,their symptoms such as abdominal pain reduced with proper treatment ,now patient in good condition then patient has discharged on dated 22/2/21.

Ectopic pregnancies should be treated with caution. Detected early in the morning investigated to determine the cause in the symptoms. An ectopic pregnancy is a pregnancy that occurs outside of the womb. Can occur in places other than the uterus, the cervix, ovary, abdomen, liver, spleen, and so on or scar from a caesarean section is a surgical procedure that is used to deliver a baby. [21]

Diagnostic exploratory laparotomy has plays vital role to make a diagnosis of the patient [22].

#### **CONSENT AND ETHICAL APPROVAL**

As per international standard or university standard guideline patients consent and ethical approval has been collected and preserved by the authors.

#### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

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