# Case Report: Rupture Ectopic Pregnancy with History of Appendectomy

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Abstract:- Rupture Ectopic Pregnancy is the occurrence of abortus and rupture in pregnancies with abnormal implantation outside the uterine cavity. One of the risk factors is pelvic infection or previous abdomen-pelvic surgery. We reported one case of Rupture Ectopic Pregnancy with a history of appendectomy in the right tubal of a 24-years-old woman in 6 weeks pregnant came with complaints of generalized abdominal tenderness especially in the lower right abdomen. The patient is diagnosed with a suspected Rupture Ectopic Pregnancy impaired with acute signs of abdomen. This acute sign of abdomen is analyzed by physical, laboratory or ultrasound examinations so that it was suspected that Ectopic Pregnancy is disturbed. Then, the patient moved to undergo an operative procedure of cito laparotomy with partial salpingectomy dextra. Obtained rupture of tuba pars ampullaris dextra.

**Keywords:-** Ectopic Pregnancy, Appendectomy, Rupture Ectopic Pregnancy.

### I. INTRODUCTION

Ectopic pregnancy is an abnormal pregnancy which the embryo attaches outside the uterine cavity. Ectopic pregnancies 90% occur in the Fallopian Tubes and can occur elsewhere such as the cervix, ovaries, myometrium, abdomen and elsewhere. 123 In the United States, the prevalence of Ectopic pregnancies is 1-2%, and Impaired Ectopic Pregnancies account for 2.7% of cases of death in pregnancy. 4 The most frequent causes of death in ectopic pregnancies are bleeding, infection, and anesthesia complications. 5 Failure of diagnose can result in intraperitoneal hemorrhage, shock, and death. Rupture Ectopic Pregnancy is the event of an abortus or rupture that causes hemodynamic disorders. 6 Rupture in Ectopic Pregnancy is a life-threatening condition and should be helped immediately.

## II. CASE REPORT

A 24-years-old woman in 6 weeks pregnant came to the Emergency Department with complaints of generalized abdominal tenderness especially the lower right abdomen, Nausea and Vomiting. Today came out fluxus from the vagina. Difficult Defecation last 3 days. A previous history of the disease was done appendectomy 5 years ago. History of Contraception does not exist. History of getting married 1 time for 2 years. Regular menstrual cycles. The patient is fully conscious but agitated, Blood Pressure 90/60 mmHg, Heart rate 114x/min, respiratory rate 22x/min, axilla temperature 36.6 degrees Celsius. Respiratory saturation 98% room air. On physical examination obtained anemic conjunctiva. Abdomen flat, generalized abdominal tenderness especially the lower right abdomen. Cold and clammy skin. Per speculum examination showed portio nulipara closed, livide, not visible erosion, not visible tumors, appeared fluxsus,. In Vaginal Toucher (VT) palpable portio nulipara closed, motion tenderness portio, corpus uteri normal anteflection, Palpable mass on the right parametrium adnexa, and bulging Cavum Douglas. On ultrasound showed free fluid with a suspicious effect of Rupture Ectopic Pregnancy. Plano test was Positive, on complete blood test Hemoglobin 10.7g/dl; Leukocytes 13,500 µL. Patient Diagnosed with Suspected Rupture Ectopic Pregnancy and was planned Laparotomy Exploration CITO. Simultaneously Patient was given 02 nasal canul 2-4lpm. Double line IV access and was given Ringer Lactate Rehydration 1000ml, ketorolac injection 1 ampoule, Ranitidine injection 1 ampoule, Ondansetron injection 1 ampoule, Cefazolin injection 2 grams. When we were preparing for surgery, the patient's hemodynamic state was worsens with a decrease in blood pressure of 80/60 mmHg. Patient was given Ringer Lactate Rehydration 2000ml, HES 500ml and Norepinephrine starting dose 0.05mcg/kgBB/m. provided 1 kolf Packed Red Cell (PRC). After the patient stabilized, laparatomy exploration was carried out, Uterus Anteflection was obtained, slightly enlarged in size. Right Adnexa / Parametrium: Right Tubal pars ampullaris appears mass size 3x3cm, there was bleeding and rupture of Right Tubal pars ampullaris, Adnexa / Parametrium Left: within normal limits. It was decided to do a right Partial Salpingectomy. The amount of bleeding during surgery was about 1500cc. After surgery the patient's condition is well.



Fig 1. On ultrasound appears Free Fluid Level Intraperitoneal

## III. DISCUSSION

Ectopic pregnancies often occur in the first trimester of pregnancy which is a potentially life-threatening condition. Risk factors of ectopic pregnancy: History of previous ectopic pregnancy, fallopian damage or adhesions from pelvic infections or previous abdomen-pelvic surgery, history of infertility, in vitro fertilization (IVF), increasing maternal age and smoking. However, half of women with ectopic pregnancies do not have identifiable risk factors. In this patient, one of the risk factors for ectopic pregnancy is a history of appendectomy which is an abdomen-pelvic surgery that may cause tubal damage or adhesions.

There are several studies with different results on the relationship between the history of appendectomy and the occurrence of ectopic pregnancy. In the study of Tarig Elraiyah et al with systematic review and meta-analysis showed that appendectomy was significantly associated with an increased risk of ectopic pregnancy. With limited data, it is hypothesized that inflammation due to appendicitis may be the cause of an increased risk of ectopic pregnancy in the future. 8.9

In research by Farzana et al, it was shown that the history of appendectomy and pelvic inflammatory disease had a much higher percentage of causing ectopic pregnancy compared to controls (52.2% vs 47.8%) (p= <0.05). The same results were revealed from previous studies that showed an association between pelvic surgery such as appendectomy and ectopic pregnancy, likely due to peritoneal and peritubal adhesions that occur after the operation.  $^{10}$ 

The main symptom (Triassic) of ectopic pregnancy is a history of delayed menstruation or amenorrhea, which is followed by abnormal bleeding (60-80%), abdominal or pelvic pain (95%). Other symptoms include nausea, vomiting, weakness, fullness of the breasts, shoulder pain, and dyspareunia. In addition, on examination, anemic conjunctiva, pelvic tenderness, motion tenderness portio, enlargement of the uterus, adnexal masses and cavum douglas stand out. If rupture

has occurred, it can cause unstable Hemodynamic to shock. Ectopic pregnancy can usually only be established at 6–8 weeks gestation at the onset of the above symptoms. <sup>11,12</sup> In this patient was found all Triassic symptoms of ectopic pregnancy, on examination also obtained anemic conjunctiva, pelvic tenderness, motion tenderness portio, right adnexal mass and bulging cavum douglas, and there was unstable hemodynamic indicating the possibility of rupture.

Some anomalies, such as miscarriages, ovarian torsion, ovarian cysts, acute appendicitis, kidney stones and pelvic inflammatory diseases, have the same symptoms as ectopic pregnancies.<sup>10</sup>

Ectopic Pregnancy Management consists of pharmacological and non pharmacological (surgical) treatment. In patients with suspected or confirmed ectopic pregnancy showing signs of Tubal Fallopian Rupture should be immediately surgically intervened. Whereas patients with stable Ectopic Pregnancy and affected fallopian tubes have not ruptured, treatment options with intramuscular methotrexate (MTX) which is the first line option, or surgical procedures with salpingostomy (removal of ectopic pregnancy while leaving the fallopian tubes in place) or salpingectomy (partial or complete removal of the affected fallopian tubes). <sup>4</sup> In this patient because she was suspected Rupture Ectopic Pregnancy, Laparotomy was performed with partial dextra salpingectomy.

The main concern after the management of ectopic pregnancy is the risk of recurrence of ectopic pregnancy and fertility in the future. Tubal patency can be evaluated by hysterosalpingography (HSG), performed immediately 3 months after the management of Ectopic Pregnancy in the postmenstrual phase (when beta-hCG levels become negative and extra-ovarian adnexal masses disappear on transvaginal ultrasound). <sup>13</sup>

# IV. CONCLUSION

Ruptured Ectopic Pregnancy is one of the life-threatening emergencies. Diagnosis and management must be carried out quickly and precisely. Women of reproductive age who come in with acute signs of abdomen should be suspected with Ectopic Pregnancy. HSG post-Ectopic Pregnancy examination is not routinely carried out, but can be considered in certain cases that need to be aware of the possibility of recurrent Ectopic Pregnancy and its tubal patency.

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