



# Unruptured 14 Weeks Tubal Ampullary Pregnancy: A Rare Case Report

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### ABSTRACT

Ectopic pregnancy is a life threatening condition and presents itself in diverse ways .Ninety five percent of ectopic pregnancies occur in fallopian tube .Ampulla is the most common site of ectopic tubal pregnancy. Diagnosis and exact location of ectopic pregnancy is usually easy during the first trimester of pregnancy by ultrasonography .However in developing countries, where resources are limited, most women do not undergo ultrasound examination during pregnancy, leading to late diagnosis. The reported average duration of diagnosis of unruptured tubal pregnancy is between 5 and 9 weeks of gestation. Rarely tubal pregnancy can remain asymptomatic and unruptured for longer duration than usual scenario. This case reports a rare case of viable, unruptured, tubal ampullary ectopic pregnancy of 14 weeks gestational age

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## Introduction

Ectopic pregnancy is one of the most common life threatening condition in early pregnancy.[1] Incidence of ectopic pregnancies varies from 10-39.5/1000 deliveries. [2,3,4]The vast majority of ectopic pregnancy implant in the fallopian tube with most common site being ampullary portion (70.0%), fimbrial (11.1%), isthmic (12.0%) and interstitial (2.4%). [5] Many risk factors are associated with ectopic pregnancies. Subsequent presentations of ectopic pregnancy varies from being asymptomatic to hemodynamic instability as a result of disturbed pregnancy.[6]Tubal pregnancy has always being considered as a complication of the first trimester pregnancy. Most of the tubal ectopic pregnancies rupture between 5<sup>th</sup> to 9<sup>th</sup> weeks of gestation causing hemorrhage and shock.[7]It is very rare for an ectopic pregnancy to progress into second trimester and remain asymptomatic. This event is rare because it is unusual for the fallopian tube to dilate to a point of carrying second or third trimester fetus. We are reporting a rare case of ampullary tubal pregnancy which progressed unruptured until 14 weeks with live fetus in situ.

## Case Report

A 40 year old patient gravida 4 Para 3, presented to the opd with history of 3 and ½ months amenorrhea .This was her first antenatal visit..She reported to the opd when she experienced on and off spotting since one month and pain in abdomen . She had regular cycles with normal flow .She



Fig. 1: unruptured tubal pregnancy

had previous 3 full term vaginal deliveries. She had no risk factors for ectopic pregnancy. On examination pulse rate was 90beats per minute ,B P was 100/60 mmhg, with moderate pallor. On abdominal examination a 6 by 8 cm sized suprabubic mass firm in consistency with restricted side to side mobility was present. A closed cervical os with slight bleeding coming through os was visible on per speculum examination. Bimanual examination revealed enlarged uterus with cervical motion tenderness ,with a lump of about 8 by 8 cm palpable through right adenexal in continuation with abdominal mass. Transabdominal sonography revealed an 14 weeks live intrabdominal pregnancy with empty uterine cavity. Minimal fluid was present in the cul de sac. Patients hemoglobin was 8 gram %,blood group was B+ with normal liver and kidney function test. Exploratory laprotomy was done after obtaining informed consent which revealed a right sided tubal ampullary lump of 10 by 10 cms (fig 1 ).Right sided salpingectomy with left sided tubal ligation was done .On cut section of tubal ampullary lump a live fetus of about 14 weeks gestational age with placenta was revealed.(fig 2).

## Discussion

The incidence of ectopic pregnancies varies from10-39.5/1000 deliveries.[2,3,4].Ectopic Pregnancy is the leading cause of first trimester pregnancy related morbidity and mortality(38 deaths/100,000events).[8] The ampullary portion of the fallopian tube is the most common location. Bouyer et al reported [5] the site of ectopic pregnancy from a 10 year population based study of 1800 cases. They found



Fig. 2: 14 weeks fetus with placenta

that only 4.5% were extratubal( tuba ovarian & abdominal) and 73% were ampullary.

Risk factors for ectopic pregnancy include a previous ectopic pregnancy, the presence of tubal damage from an infection or prior abdominal/pelvic surgery, history of infertility, treatment for invitro fertilization, increased maternal age and smoking.[9] Half of the women with ectopic pregnancies have no identifiable risk factors .The incidence is on the rise probably due to increase in sexually transmitted diseases and availability of assisted reproductive techniques in the country.[5]

Ectopic pregnancies are easily diagnosed clinically in a ruptured state but the diagnosis in unruptured state is difficult because there may be neither symptoms nor signs which can be elicited.[10] Early pregnancy transvaginal sonographic examination helps to identify the site of pregnancy and to diagnose ectopic pregnancy early before the occurrence of tubal rupture which can be life threatening. More accurate detection of ectopic pregnancy has been made possible by the association of beta subunit of human chorionic gonadotropin (beta – hcg) and transvaginal ultrasonography.[11] Transvaginal sonographic diagnosis is significantly reliable, accordingly undisturbed tubal pregnancy is commonly diagnosed at 6.9+/- 1.9 weeks .The presence of an adenexal gestational sac with a fetal pole and cardiac activity is seen as the most specific sign of ectopic pregnancy, but such a sign is seen in only 10%-17% of cases.[12] However, in many rural areas that lack health education and proper antenatal care early diagnosis is missed and the patient is first presented with tubal rupture..Cisse et al in a study in Senegal, reported 242 out of 252(94.9%) being detected at the time of rupture.[13]

Tubal pregnancies generally rupture between 5-9 weeks of gestation.[4]Lack of sub mucosal layer within the fallopian tube wall allows ovum implantation with in the muscular wall and the rapidly proliferating trophoblasts erode the muscularis layer, so pregnancy cannot continue and tubal rupture occurs at 7.2+/-2.2 weeks.[5]The silent presentation of advanced tubal pregnancies were reported with significant presentations. N Kwasong et al and Sachan et al [14] reported some cases of advanced ectopic pregnancies.

Late diagnosis of ectopic pregnancy leads to major complications in almost all cases and needs surgical intervention. The treatment of advanced tubal pregnancy is always a total salpingectomy. It is difficult to perform conservative tubal surgery due to excessive deformation

of fallopian tube[4],thus in our case total right sided salpingectomy was done. In ectopic pregnancies future fertility is a serious concern. Early diagnosis of ectopic pregnancy in the unruptured state may facilitate conservative tubal surgeries like salpingostomy or medical treatment to achieve successful future pregnancy outcome.

## Conclusion

There has been a rise in the incidence of ectopic pregnancies since 1970s. Ectopic pregnancy should always be considered in patients of child bearing age who present with early pregnancy problems of lower abdominal pain and irregular vaginal bleeding. Advanced tubal ectopic pregnancy is rare. Awareness of risk factors and improved technologies like serum beta hcg doubling time and transvaginal sonography allows for ectopic pregnancy to be diagnosed earlier .Moreover women should be encouraged to seek medical attention as soon as they miss their periods .Timely diagnosis and treatment will help to reduce maternal morbidity and mortality and restore fertility.

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## Competing Interests

Not Declared

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