

OVARIAN PREGNANCY – A REPORT OF TWO CASES

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ABSTRACT

Ovarian pregnancy is the most common type of non-tubal ectopic pregnancy. It may occur without the usual expected antecedent risk factors for ectopic pregnancy. It is difficult to preoperatively make a diagnosis of ovarian pregnancy. Management of ovarian pregnancy is primarily surgical, and conservation of ovary is essential in the event that the patient desires a future pregnancy. We present 2 cases of ovarian pregnancy in our institute who underwent partial ovariectomy (wedge resection) and in both cases ovaries could be conserved.

Key words: Ovarian pregnancy, conservative management, wedge resection.

INTRODUCTION

Ectopic pregnancy is one of the important causes of maternal morbidity and mortality in early pregnancy. The estimated prevalence of ectopic pregnancy is 1-2% worldwide¹. These pregnancies account for 3%-4% of pregnancy-related deaths². Majority of ectopic pregnancies are found in the fallopian tube while only about 0.15-3.0 % of ectopics occur in the ovary³. Risk factors include previous history of pelvic infection, history of infertility, use of artificial reproduction technique and intrauterine device. The signs and symptoms of ovarian pregnancy are similar to those of tubal pregnancy. Diagnosis and management of ovarian pregnancy continues to challenge the practicing clinician. Diagnosis is most frequently made at surgery⁴ and requires histopathological confirmation. Management requires laparoscopy or laparotomy, and in almost all cases ovary can be preserved since implantation is superficial⁵. We present 2 cases of ovarian pregnancy in our institute and in both cases ovaries could be conserved.

CASE REPORTS

CASE 1

A 23 year old female with history of 1 month 8 days of amenorrhoea presented with dull aching pain in the lower abdomen from the past 15 days and spotting per

vagina 8 days back. Her previous menstrual cycles were regular. The patient, a 4th gravida, had a previous history of one full term normal vaginal delivery, two spontaneous first trimester abortions, and one termination by medical method at 1 1/2 months. She also gave history of Copper T insertion 5 months after the first vaginal child birth for 1 year, which was removed 6 months back. Physical examination revealed a pulse rate of 84 beats/min and blood pressure of 114/70 mm Hg. Abdominal examination revealed suprapubic tenderness. On speculum examination, cervical os was closed and no active bleeding was noted through os. On bimanual examination, uterus was found to be of 6 weeks size, cervical movement tenderness and bilateral forniceal tenderness was noted. Urine pregnancy test was positive and quantitative serum β Hcg level was 884.8 mIU/ml. Her routine haematological and biochemical tests were within normal limits. On ultrasonography, no gestational sac was seen inside the uterus, but an ill-defined mass lesion was seen in the right adnexa with heterogeneity measuring 7.5 x 6.7cms, minimal vascularity was noted around the echogenic component measuring 3.8x4.0 cm, left ovary measured 28x18 mm and free fluid was present in pouch of douglas. A provisional diagnosis of ruptured tubal ectopic pregnancy was made and patient was taken up for emergency laparotomy. Intraoperatively there was haemoperitoneum of around 400 ml, right

ovary was enlarged with hemorrhage from the surface and right fallopian tube was intact (Fig.1). Left tube and ovary were normal. Right sided partial oophorectomy was performed and specimen was sent for histopathological examination.

Histopathology revealed ovarian tissue with chorionic villi, decidualized tissue and extensive haemorrhage (Fig 2). Features were consistent with ovarian pregnancy. Her post-operative period was uneventful.

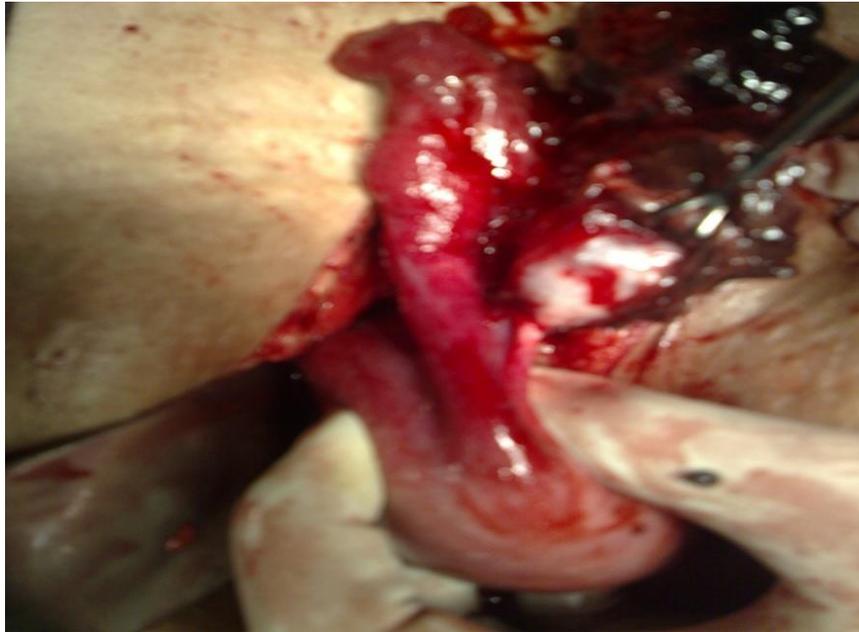


Figure 1: Enlarged right ovary with hemorrhage from the surface with intact right fallopian tube.

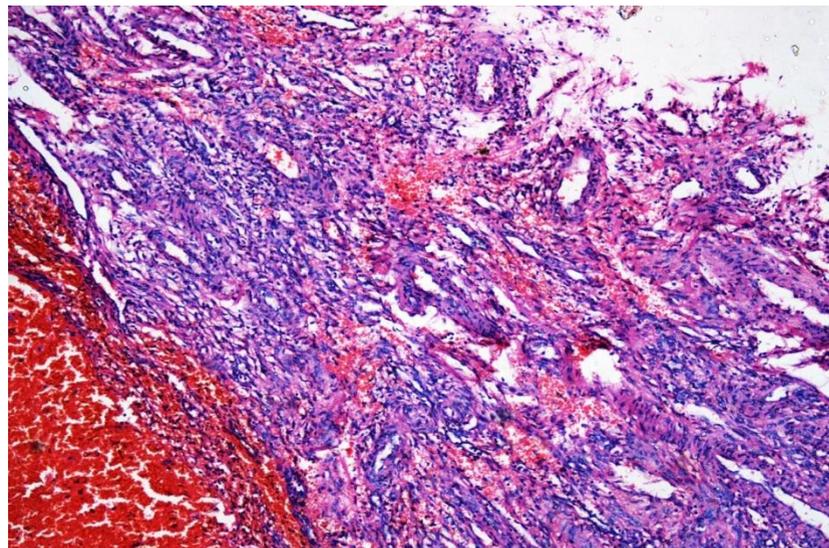


Figure 2: Ovarian tissue with chorionic villi, decidualized tissue and extensive haemorrhage.

CASE 2

A 31 year old 2nd gravida, with previous vaginal delivery presented with 7 weeks of amenorrhea with complaints of pain abdomen for 1 day. She also gave

history of spotting per vagina for 3 days, 2weeks back. She had regular menses and was not using any contraceptive methods. On physical examination she was hemodynamically stable. Per abdomen examination revealed suprapubic

tenderness. On pervaginal examination cervical movement tenderness and forniceal tenderness was present. Urine pregnancy test was positive. Transvaginal sonography showed an empty uterine cavity with a complex adnexal mass of 4x4cm and free fluid in the pouch of douglas. A provisional diagnosis of ruptured ectopic pregnancy was made and she was taken up for laparotomy. At surgery, there was hemoperitoneum of 500ml. Right tube was normal, a 3x3 cm mass was seen adherent to the right ovary with blood clots and hemorrhagic edges. Uterus, left tube and left ovary were normal. Wedge resection of the right ovary was performed and contents were sent for histopathology. Histopathological examination of the tissue confirmed the presence of right ovarian pregnancy. Her post-operative period was uneventful.

DISCUSSION

Ectopic pregnancy is of considerable medical importance because it is not only associated with maternal death, but also adversely affects future reproductive capability and outcome of subsequent pregnancies. The recorded incidence of ectopic pregnancy has increased markedly over the last 3 decades⁶.

Early diagnosis of ovarian pregnancy is necessary in order to avoid more serious complications. However preoperative diagnosis remains challenging and it is generally diagnosed during surgery. It is

most commonly confused with tubal ectopic pregnancy and ruptured corpus luteal cyst. Transvaginal scanning (TVS) has proved to be an invaluable tool in the diagnosis of this condition. Final diagnosis of ovarian ectopic is made only on histopathology on the basis of spiegelberg's criteria- a) The fallopian tube on the affected side should be normal, b) The fetal sac must occupy the position of ovary. C) The ovary with fetal sac must be connected to the uterus by the ovarian ligament. D) Ovarian tissue must be located in the sac wall⁷.

Treatment is primarily surgical, either by laparoscopy or by laparotomy although conservative treatment with methotrexate is also being tried. Traditionally, oophorectomy or salpingo-oophorectomy was performed, including the removal of the pregnancy. No case of repeat ovarian pregnancy has been reported in contrast to approximately 15% recurrent tubal pregnancy⁸. Patients with an ovarian pregnancy have a good prognosis for future fertility and therefore conservative surgical management is advocated which can be accomplished by an ovarian wedge resection.

The incidence of ectopic pregnancies in our hospital is 1.24%, 2.975% is ovarian ectopic. Our case fulfilled all the 4 Spiegelberg criteria, conservative surgery allowed preservation of ovary and reproductive capability.

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