PRIMARY OVARIAN PREGNANCY: A CASE REPORT

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ABSTRACT: Primary ovarian pregnancy is a rare entity and usually occurs in young women using intra uterine device. Preoperative diagnosis is difficult and is a challenge to the clinicians. A diagnostic delay may lead to rupture, secondary implantation or operative difficulties. Here we present a case of a 30 year old primiparous woman who presented with lower abdominal pain and was diagnosed as ectopic pregnancy and was managed with right ovariectomy.
KEYWORDS: Ovarian pregnancy, ovariectomy, primiparous.

CASE REPORT: A 30 year old primiparous woman was referred with complaints of lower abdominal pain and two episodes of vomiting of 1 day duration. She had history of 2 months amenorrhea. Her previous menstrual cycle was regular and no dysmenorrhea. She had a previous full term normal vaginal delivery 5 years back. On examination, she was pale, pulse 100/min, BP 110/70 mmHg and there was tenderness in the right iliac fossa. Per vaginal examination showed bleeding through os, bulky uterus and palpable right adnexal mass of size 5 cm × 5 cm. On investigation, the urine pregnancy test was positive, Hb% was 7.8 gm%, and other routine investigations were within normal limits. On ultrasonography, no gestational sac was seen inside the uterus but a right adenexal gestational sac 4×3.5×3.5 cm was seen. Provisional diagnosis was unruptured ectopic pregnancy. Serum β human chorionic gonadotropin (HCG) was 12,670 mIU/mL. A decision for laparotomy was taken after the patient was stabilised. Intra-operatively, the uterus was normal in size, with no hemoperitonium and both fallopian tubes were normal. The right ovary was enlarged with a bluish red mass of 5×5 cm. Right-sided ovariectomy was performed and the cut section showed products of conception. Specimen was sent for histopathology which was confirmatory of primary ovarian pregnancy. Post-operative period was uneventful and the patient was discharged on 9th postop day.

INTRODUCTION: Primary ovarian pregnancy is a rare entity, the first case being reported by St. Maurice in 1682.[1] The reported incidence is 0.15–3% of all ectopic gestations.[2] It can be classified as primary and secondary. Primary when ovum is fertilized while still within the follicle, secondary when fertilization takes place in the tube and the conceptus is later regurgitated to be implanted in the ovarian stroma. They can be intrafollicular or extra follicular.

DISCUSSION: Primary ovarian pregnancy is one of the rarest types of extra-uterine pregnancy. The conditions most commonly confused with ectopic ovarian pregnancy are ruptured haemorrhagic corpora lutea, "chocolate" cysts and ruptured tubal ectopic pregnancies. The initial diagnosis is often made on the operating table and the final diagnosis only on histopathology. In 1878, Spiegelberg described four criteria for the pathologic diagnosis of ovarian pregnancy: the tube has to be entirely normal, the gestational sac has to be anatomically located in the ovary,

the ovary and the gestational sac have to be connected to the uterine ovarian ligament, and placental tissue has to be mixed with ovarian cortex.[3]

The major risk factor associated with the development of ovarian pregnancy is the current use of intrauterine device. Intrauterine device is effective in preventing intrauterine and tubal pregnancies in 99.5% and 95% respectively. However it has little effect on the prevention of an ovarian pregnancy.[4] The rate of intrauterine device use in reported ovarian pregnancies is 17 to 25%.[5] Other factors include endometriosis, sexually transmitted diseases, ovulation induction agents, tubal sterilization, and a history of abdominal surgery.

The signs and symptoms of ovarian pregnancy are similar to disturbed tubal pregnancy like abdominal pain, vaginal bleeding, and amenorrhea. Rupture in the first trimester is the usual rule in an ovarian ectopic, but the pregnancy may advance to full term.[6]

Ovarian pregnancies are very unlikely to be diagnosed preoperatively, as they may resemble any other ovarian cyst. Diagnosis of ovarian pregnancy should be suspected from elevated beta HCG, lack of intrauterine gestation, a complex ovarian mass on USG and patient's risk factors. With the improvement in the ultrasonographic skill and instrumentation, especially with the use of vaginal probe, ovarian pregnancy can be diagnosed pre-operatively.[7]

Methotrexate is an effective therapeutic option in the management of unruptured ovarian ectopic pregnancy. It permits to avoid more invasive interventional surgery, with possible complications such as hemorrhage, ovariectomy or later pelvic adhesions.[8] Patients most often undergo surgery for suspected tubal ectopic pregnancy or hemorrhagic corpus luteum. In the past oophorectomy has been advocated as treatment of ovarian gestations, but ovarian cystectomy, mostly by laparoscopic techniques, is now the preferred procedure.[9]

CONCLUSION: Primary Ovarian pregnancy is very rare and is dangerous because of internal bleeding. Thus when suspected, intervention is called for. Traditionally an exploratory laparotomy is performed. Once the ovarian pregnancy is identified, oophorectomy or salpingo-oophorectomy is performed. Today the surgery can often be performed via laparoscopy.

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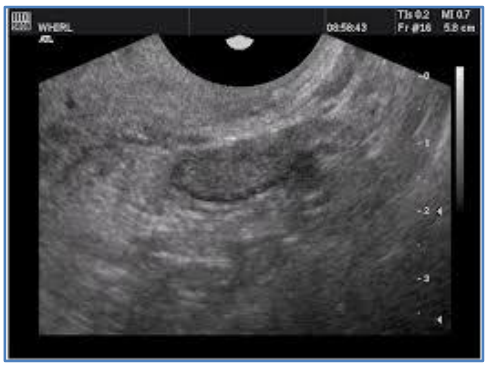

FIG. 1: ULTRASOUND ABDOMEN SHOWING GESTATIONAL SAC IN R OVARY

FIG. 2: OVARIECTOMY SPECIMEN SHOWING GESTATIONAL SAC

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