Case Report

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Ovarain Ectopic Pregnancy

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Abstract

Ovaries are rare sites of ectopic gestation, here we present a case of ovarian ectopic pregnancy and stress the importance of histopathological examination for definitive diagnosis.

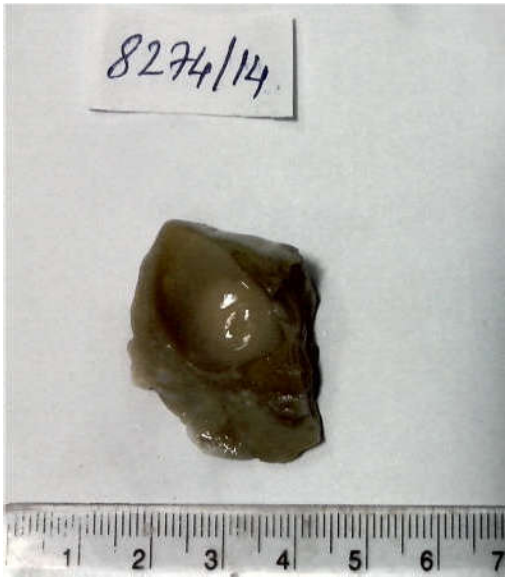
Keywords: Ectopic Pregnancy; Ovary.

Introduction

The incidence of ectopic pregnancy has been on the rise over the past two decades. Ectopic gestation may be extrauterine tubal, ovarian, abdominal. Ovarian pregnancy is a rare variant of ectopic pregnancy. It remains a challenge for the diagnosis, even today. There are very few reports of an accurate preoperative diagnosis. Most commonly, patients undergo surgery for suspected ruptured tubal ectopic pregnancy, hemorrhagic corpus luteum or hemorrhagic ovarian cyst. The final diagnosis however, is provided by histopathological examination by using the Spiegelberg's criteria.

Clinical Presentation

A 22 year old female, P1L1, not sterilized, was admitted in the emergency ward of Bapuji Hospital, Davangere, Karnataka with history of acute onset of abdominal pain , not associated with vomiting, loose stools or giddiness. On enquiry, patient gave a history of two months of amenorrhea. On examination, patient had a pulse rate of 90/ min, blood pressure of 90/60mmhg and severe pallor was present. Abdominal examination revealed generalized tenderness all over the abdomen. Urine pregnancy test was positive. On clinical assessment, a diagnosis of ruptured ectopic pregnancy was made. Blood samples collected for the routine investigations. Ultrasound examination of abdomen and pelvis showed evidence of gross free fluid in the peritoneal cavity with no evidence of intrauterine or extrauterine gestational sac. Patient was taken for emergency laparotomy. Intraoperatively, approximately 500ml of haemoperitoneum was noted with a normal uterus and grossly normal tubes. A small hemorrhagic area was noted at the tip of the right ovary with normal left ovary.



Picture 1: Gross photograph of the specimen

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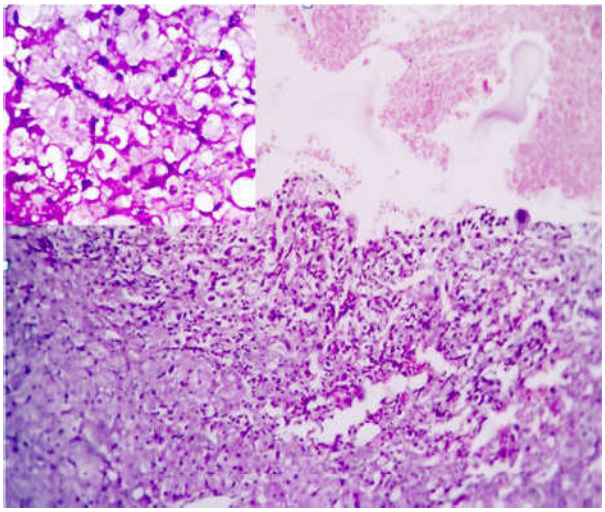
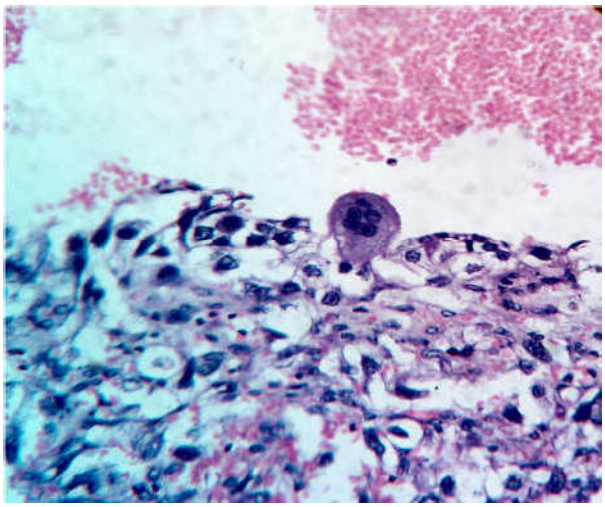
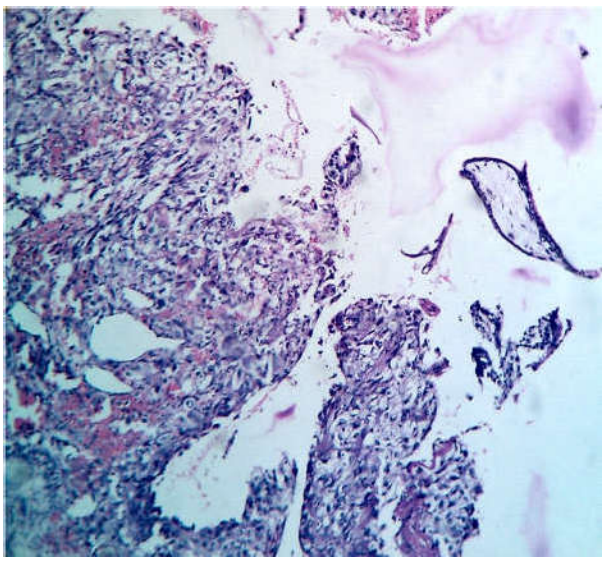


Picture 2: Photomicrograph showing corpus luteum in the left lower area, trophobastic tissue with syncytiotrophoblast in the centre and hemorrhage in the right upper area. Inset: high magnification showing hyaline globules within the corpus luteum



Picture 3: Photomicrograph showing syncytiotrophoblast



Picture 4: Photomicrograph showing chorionic villi along with trophoblastic tissue

Gross Examination

Right oophorectomy was performed and sent for histopathologic examination. The ovary appeared globular, grey white, measuring 4x3x1cm. The external surface showed a cyst measuring 2x1cm filled with reddish brown fluid, rest of the ovarian tissue appeared grey white

Microscopy

Ovarian tissue showed a large corpus luteum with numerous hyaline globules. Just besides corpus luteum, there were trophoblastic tissue seen along with chorionic villi.

Discussion

Ovarian ectopic pregnancy is associated with a high morbidity and mortality. There is a strong association between ovarian ectopic pregnancy and intrauterine contraceptive device use in the literature [1-3]. However, our patient did not give a history of use of any such device.

Pre operative diagnosis of ovarian pregnancy is fraught with difficulties. Definitive diagnosis requires proof of ovarian nidation and exclusion of tubal nidation with secondary involvement of ovary [4].

Usually the diagnosis of ovarian pregnancy is based on the improper rise of serum beta-hCG levels, sonographic findings of an empty uterus, a highly characteristic ovarian formation with double hyperechogenic ring surrounding a small hypoechogenic field and the laparoscopic verification of Spiegelberg's criteria [5].

Spiegelberg had defined four criteria for the diagnosis of primary ovarian pregnancy. They are: (a) the tube on the affected side must be normal, (b) the gestational sac must occupy the habitual place of the ovary, (c) it must be connected to the uterus by the utero-ovarian ligament, (d) unequivocal ovarian tissue must be histologically demonstrated in the wall of the sac [2].

Histopathological diagnosis of ovarian pregnancy is usually made by the presence of chorionic villi restricted within the ovary and not in the fallopian tube [6]. In our case trophoblastic cells and chorionic villi were noted within the ovarian tissue. Numerous hyaline globules were found within the decidual tissue, which presumably represent degenerated decidual cells [7].

Removal of the entire ovary, including the ectopic pregnancy is the management of choice, wedge

resection of the ovary can be considered in patients wishing to preserve the reproductive function. Etoposide or methotrexate have been reported as a medical treatment option in the postoperative period if beta HCG level remains high, indicating persistent trophoblastic disease [8,9]. Ovarian pregnancy can also be terminated by injecting 50 mg of methotrexate into the ectopic sac [10].

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