OVARIAN PREGNANCY

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ABSTRACTS

During the 1970s, the number of hospitalizations for ectopic pregnancy is more than double, by the mid1980s, it had easily increased to triple.[1] The mortality from ectopic pregnancies has decreased 90% since 1979.[2] Most of the ectopic pregnancies are tubal (95-97%)--, rare sites are ovary (0.5-1%), cervix (0.1%) and interstitial/ cornual (2 - 5%). Sohaey and Woodward published a case of cervical ectopic pregnancy in 1966.[3] Doppler examination demonstrated a living embryo. The patient was treated with local methotrexate and did well. Cervical pregnancy is very rare (0.1%) and may mimic a complex nabothian cyst or cystic malignancy. The best results in ectopic gestations are obtained with transvaginal ultrasound (TVUS) and color flow imaging (CFI).[4] Without the use of color Doppler, 2% to 16% of ectopic gestations may be overlooked.[5-6] In some ectopic pregnancies, the echogenic ring may look like the ovarian corpus luteum cyst.[7] A hemorrhagic ovarian cyst may simulate ruptured ectopic pregnancy.[8] The broad prevalence of pelvic inflammatory disease (PID) and its successful treatment with antibiotics have created a patient population with patent but dysfunctional fallopian tubes; similarly, reanastomosis of ligated tubes, the use of intrauterine contraceptive devices (IUCD), and endometriosis are contributing risk factors for ectopic gestation. It is possible to identify an intrauterine gestational sac by the transabdominal route when the serum beta HCG (human chorionic gonadotropin) level is 1800 mIU (or about 35 days menstrual age) and by transvaginal scanning at a level of 1000 mIU (about 32 days menstrual age). The higher incidence of an ectopic twin in stimulated ovulation should be borne in mind.[9] Transvaginal color duplex sonography (TV.CDS) may enhance detection of some ectopic pregnancies that are not apparent of conventional transvaginal sonography.[10] Ali and Ferdous reported a case of ovarian pregnancy of about 18 wks. gestation.[11] Ovarian pregnancy may be (a) primary. (ovum fertilization within the ovary) or (b) secondary (the implantation of a tubal abortion on an ovary). Nisenblat et al reported a case of primary ovarian ectopic pregnancy misdiagnosed as an asymptomatic eight-weeks missed abortion.[12] and showed the importance of power Doppler study and histologic section.

REFERENCE

1. Filly RA. Ectopic pregnancy. In Callen PW. Ultrasonography in Obstetrics and Gynecology. 2nd ed. 1988, WB Saunders Co. Philadelphia, pp. 447-466.
2. Maklad N, Wright MB. Grey scale ultrasound in the diagnosis of ectopic pregnancy. Radiology 1978: 126: 221-225.
3. Sohaey R, Woodward P. The spectrum of first trimester ultrasound findings. Curr Probl Diagn Radiol 1966 ; 25 : 53-76.
4. Metreweli C. Obstetric imaging. In Pettersson H (ed) ; A Global Textbook of Radiology vol. II, pp. 1217-1236. The NICER Institute, Oslo, 1995.

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5. Taylor KJW, Ramos IM, Feyock AL et al. Ectopic pregnancy: Duplex Doppler evaluation. Radiology 1989; 173: 93-97.
6. Atri M. Leduc C, Gillet P et al. Role of endovagimal sonography in the diagnosis and management of ectopic pregnancy. Radio-Graphics 1996; 16: 755-774.
7. Sohaey R. The first trimester. In Zwiebel WJ, Sohaey R (eds.): Introduction to Ultrasound. 1998. Saunders, Philadelphia. pp. 372-386.
8. Jain KA. Sonographic spectrum of hemorrhagic ovarian cysts. J Ultrasound Med 2002; 21: 879-886.
9. Fried AM, Cosgrove DO. Uterus and ovaries. In Goldberg BB (ed.) Textbook of Abdominal Ultrasound, Williams and wilkins, Maryland, 1993. pp. 452-479.
10. Fleischer AC, Kepple DM. Transvaginal Color Duplex Sonography: clinical potentials and limitations. Semin Ultrasound CT. MRI. 1992; 13: 69-80.
11. Ali MM, Ferdous J. Case report: ovarian pregnangy. ASEAN J Radiol 2004; X: 57-59.
12. Nisenblat V, Leibovitz Z, Tal J, Barak S, Shapiro I, Degani S, Ohel G. Primary ovarian ectopic pregnancy misdiagnosed as first -trimester missed abortion. J Ultrasound Med 2005; 24: 539-543.