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Utilization of ultrasound in diagnosing Heterotopic Pregnancy

Ahmed. Abd Elrahim[4], AM Abd Elgyoum[1, 2], H. Osman[1, 3], A. Elzaki1[4], E. Abd Elrahim[1, 3], Ali Hassan[1]
[1]Taif University, college of applied medical science, P O Box 2425 post code 21944 .Taif KSA
[2]National Ribat University, Nile Street Burri, Postal Code 11111, Khartoum Sudan
[3] College of Medical Radiologic Science, Sudan University of Science and Technology P.O.Box 1908, Khartoum. Sudan
[4]Faculty of Radiology Science and Medical Imaging, Alzaiem Alazhari University, P.O.Box, 1432, Khartoum North, Sudan

***Corresponding author**
Ala. Mohammed. Abd Elgyoum
Email: alas-sa@hotmail.com

Abstract: A heterotopic pregnancy is a rare complication of pregnancy in which both extra-uterine (ectopic pregnancy) and intrauterine pregnancy occur simultaneously. It may also be referred to as a combined ectopic pregnancy, multiple sited pregnancy, or coincident pregnancy.39-years old female pregnant woman G III para II visits the emergency department complaining of acute pelvic pain and amenorrhea for two months, she was scanned by ultrasound machine by curved linear probe with frequency 3.5 MHz, (US) revealed that there is normal intrauterine viable embryo with normal cardiac activity is present.
Keywords: Adnexal mass, heterotopic Pregnant, intrauterine, US.

INTRODUCTION

A heterotopic pregnancy is a rare [1, 2] complication of pregnancy in which both extra-uterine (ectopic pregnancy) and intrauterine pregnancy occur simultaneously [3]. It may also be referred to as a combined ectopic pregnancy, multiple sited pregnancy, or coincident pregnancy. The prevalence of heterotopic pregnancy is estimated at 0.6-2.5:10,000 pregnancies [4]. There is a significant increase in the incidence of heterotopic pregnancy in women undergoing ovulation induction. An even greater incidence of heterotopic pregnancy is reported in pregnancies following assisted reproduction techniques such as In Vitro Fertilization (IVF) and Gamete intra fallopian transfer (GIFT), with an estimated incidence at between 1 and 3 in 100 pregnancies [5]. If there is embryo transfer of more than 4 embryos, the risk has been quoted as 1 in 45 [5]. In natural conceptions, the incidence of heterotopic pregnancy has been estimated to be 1 in 30 000 pregnancies [5].

CASE REPORT

Heterotopic pregnancy refers to coexisting ectopic and intrauterine pregnancy.39-years old female pregnant woman, G III para II, 8 weeks + 2days gestational age. Came with acute pelvic pain and amenorrhea for two months and was scanned by ultrasound machine by curved linear probe with frequency 3.5 MHz (US) revealed that there is normal intrauterine viable embryo with normal cardiac activity and there is Lt adnexal viable embryo with normal cardiac activity = Lt tubal ectopic pregnancy, Free fluids seen in the peritoneal cavity.

DISCUSSION

Ultrasonographic findings given the overlap in clinical presentations, imaging is critical for diagnosis. However, the findings can be misleading in HP. Clear and simultaneous visualization of both intrauterine and extra uterine pregnancies is not always possible, especially early in gestation. In patients treated with ART, ovarian hyper stimulation syndrome is a frequent occurrence that can mask the presence of an EP. [6] It is not uncommon for HP to be initially mis interpreted as a luteal cyst [7]. Trans vaginal ultra sonogram can detect an IUP as early as 4.5 to 5 weeks' gestation. Cardiac activity can be detected at 5.5 to 6 weeks [8].

Heterotopic pregnancy can have various presentations. It should be considered more likely (a) after assisted reproduction techniques, (b) with persistent or rising chorionic gonadotropin levels after dilatation and curettage for an induced/spontaneous abortion, (c) when the uterine fundus is larger than for menstrual dates, (d) when more than one corpus luteum is present in a natural conception, and (e) when vaginal bleeding is absent in the presence of signs and symptoms of ectopic gestation [9].

A heterotopic gestation can also present as hematometra and lower quadrant pain in early pregnancy [10]. Most commonly, the location of

ectopic gestation in a heterotopic pregnancy is the fallopian tube. However, cervical and ovarian heterotopic pregnancies have also been reported [11, 12]. Considering spontaneous pregnancies, every physician treating women of reproductive age should be aware of the possibility of HP. It can occur in the absence of any predisposing risk factors. A high index of suspicion followed by an early surgical laparoscopic intervention can minimize maternal morbidity and preserve the developing of IUP. With early diagnosis and treatment, 70% of the intrauterine pregnancies will reach viability [13].

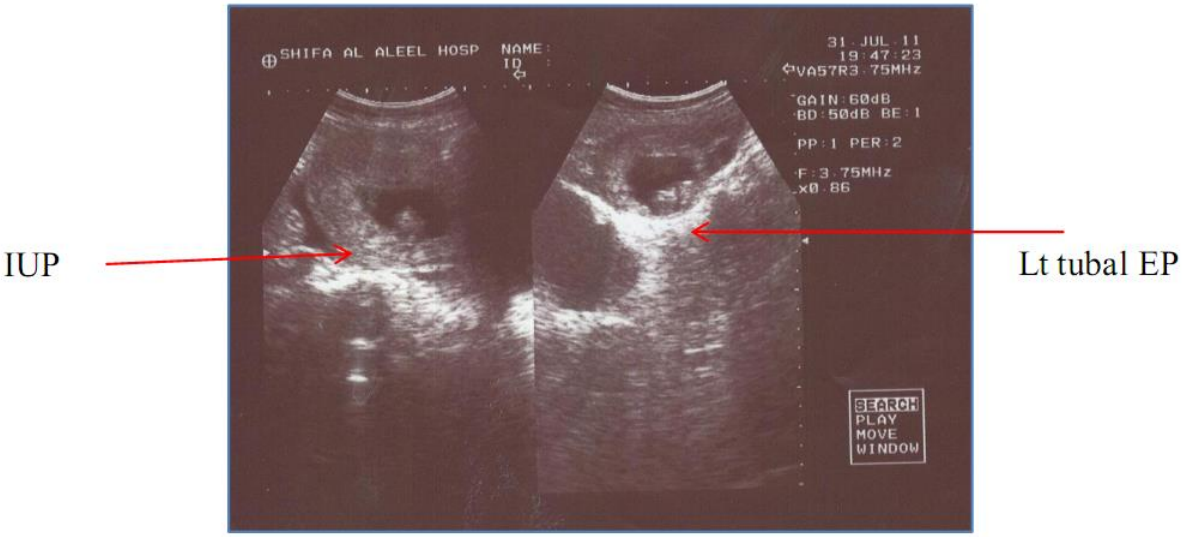

Fig 1: TAS showing an intrauterine gestation and an adnexal mass

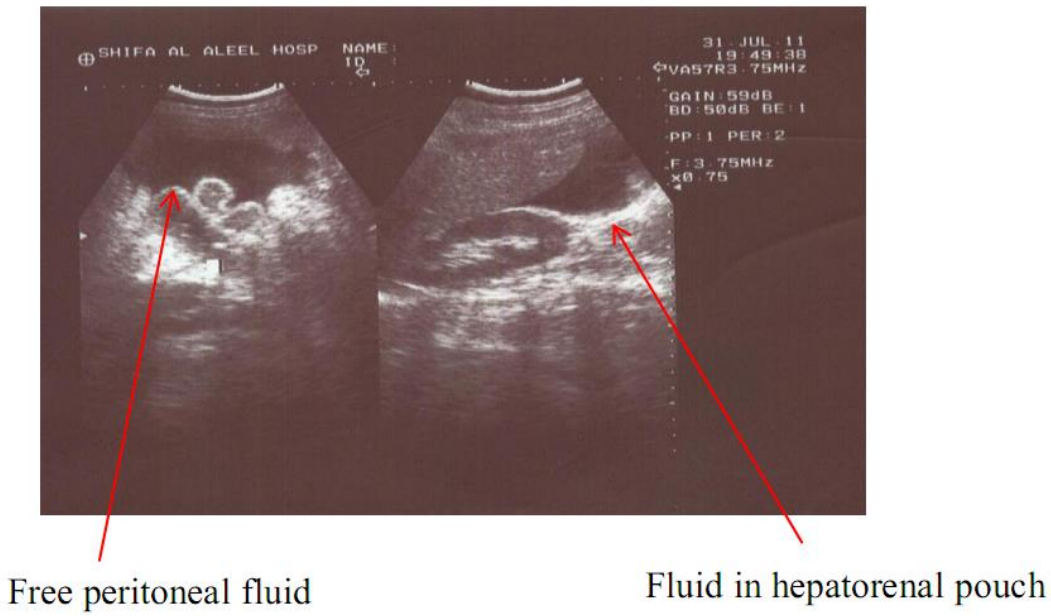

Fig-2: TAS showing Fluid in hepato renal pouch and free perito

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