



MANAGEMENT OF ECTOPIC PREGNANCY

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ARTICLE INFO

Article History:

Received 14th January, 2018
Received in revised form
28th February, 2018
Accepted 08th March, 2018
Published online 30th April, 2018

Key Words:

Ectopic Pregnancy,
Complication,
Vaginal Bleeding.

ABSTRACT

Background: Ectopic pregnancy is a serious and common universal emergency in clinical practice and remain a major medical and surgical problem.

Objectives: To evaluate the causes of the ectopic pregnancy and managing there in a perfect way to decrease the morbidity and mortality of the patients.

Patients and Method: This is an interventional study on 100 patients which was studied at Al-Dahwi Private Hospital with ectopic pregnancy from the period January 2016 to January 2018.

Results: One hundred patients were studied, the age ranged from 20 to 50 years, with a mean age of 25 years + 5 years, the majority being in the 3th decade of life constituting 50 patients (50%). Also our study showed that the location of ruptured ectopic pregnancy are right tube 45 patients 45%, left tube 35 patients 35%, right ovary 8 patients 8%, left ovary 6 patients 6%, right fimbriae 4 patients 4% and left fimbriae 2 patients 2%.

Conclusion: Early diagnosis and rapid surgical interference is very important to reduce morbidity and mortality.

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Citation: Dr. Aseel Hani Ayob, 2018. "Management of ectopic pregnancy", *International Journal of Development Research*, 8, (04), 20171-20173.

INTRODUCTION

The uterus measures approximately 8 cm in length in the nulliparous female, It comprises a: fundus (part lying above the entrance of the fallopian tubes), body and cervix, the cervix is sunken into the anterior wall of the vagina and is consequently divided into supravaginal and vaginal parts, the internal cavity of the cervix communicates with the cavity of the body at the internal os and with the vagina at the external os, the fallopian tubes lie in the free edges of the broad ligaments and serve to transmit ova from the ovary to the cornua of the uterus, they comprise an: infundibulum, ampulla, isthmus and interstitial part, the uterus is made up of a thick muscular wall (myometrium) and lined by a mucous membrane (endometrium), the endometrium undergoes massive cyclical change during menstruation, the uterus and cervix are related to the uterovesical pouch and superior surface of the bladder anteriorly, the recto-uterine pouch (of Douglas), which extends down as far as the posterior fornix of the vagina, is a posterior relation, the broad ligament is the main lateral relation of the uterus (Omar Faiz, 2002). In the majority, the uterus is anteverted, i.e. the axis of the cervix is bent forward on the axis of the vagina.

In some women the uterus is retroverted (Cecchino, 2014). Each ovary contains a number of primordial follicles which develop in early fetal life and await full development into ova, in addition to the production of ova, the ovaries are also responsible for the production of sex hormones, each ovary is surrounded by a fibrous capsule, the tunica albuginea, the ovary lies next to the pelvic side wall and is secured in this position by two structures: the broad ligament which attaches the ovary posteriorly by the mesovarium; and the ovarian ligament which secures the ovary to the cornu of the uterus (Omar Faiz, 2002) Ectopic pregnancy is a complication of pregnancy in which the embryo attaches outside the uterus (Cecchino, 2014). Signs and symptoms classically include abdominal pain and vaginal bleeding, fewer than 50 % of affected women have both of these symptoms, the pain may be described as sharp, dull, or crampy, Pain may also spread to the shoulder if bleeding into the abdomen has occurred (Crochet, 2013). Severe bleeding may result in a fast heart rate, fainting, or shock (Cecchino, 2014). With very rare exceptions the fetus is unable to survive (Kirk, 2006). From fertilization to delivery, pregnancy requires a number of steps in a woman's body, one of these steps is when a fertilized egg travels to the uterus to attach itself. In the case of an ectopic pregnancy, the fertilized egg doesn't attach to the uterus. Instead, it may attach to the fallopian tube, abdominal cavity,

or cervix. While a pregnancy test may reveal a woman is pregnant, a fertilized egg can't properly grow anywhere other than the uterus. According to the American Academy of Family Physicians (AAFP), ectopic pregnancies occur in about 1 out of every 50 pregnancies (20 out of 1,000). An untreated ectopic pregnancy can be a medical emergency. Prompt treatment reduces your risk of complications from the ectopic pregnancy, increases your chances for future, healthy pregnancies, and reduces future health complications. The cause of ovarian pregnancy is unknown, specifically as the usual causative factors – pelvic inflammatory disease and pelvic surgery – implicated in tubal ectopic pregnancy seem to be uninvolved (Ercal, 1997). There appears to be a link to the intrauterine device (IUD) (Ercal, 1997 and Raziell, 2004). however, it cannot be concluded that this is causative as it could be that IUDs prevent other but not ovarian pregnancies. Some have suggested that patients who undergo IVF therapy are at higher risk for ovarian pregnancy (Priya, 2009). An ovarian pregnancy is usually understood to begin when a mature egg cell is not expelled or picked up from its follicle and a sperm enters the follicle and fertilizes the egg, giving rise to an intrafollicular pregnancy, it has also been debated that an egg cell fertilized outside of the ovary could implant on the ovarian surface, perhaps aided by a decidual reaction or endometriosis, ovarian pregnancies rarely go longer than 4 weeks; nevertheless, there is the possibility that the trophoblast finds further support outside the ovary and thus may affect the tube and other organs, in very rare occasions the pregnancy may find a sufficient foothold outside the ovary to continue as an abdominal pregnancy, and an occasional delivery has been reported (Helde, 1972). An ectopic pregnancy may be suspected on clinical grounds but making the diagnosis can be difficult because the presentation is so variable and can mimic that of a miscarriage (Stephen Kennedy and Enda Mc Veigh, 2008).

There may be a history of lower abdominal pain with a small amount of vaginal bleeding at 4–6 weeks' gestation, on vaginal examination there may be cervical excitation and tenderness in the vaginal fornices; the cervical os is closed. Alternatively, the woman may not have any symptoms or physical findings, the urinary pregnancy test is usually positive (Stephen Kennedy and Enda Mc Veigh, 2009). Modern monoclonal antibody-based urine tests can detect the beta subunit of human chorionic gonadotropin (β -hCG) at levels of 25 IU l⁻¹, which are reached 9 days post-conception, i.e. on day 23 of the menstrual cycle assuming ovulation occurred on day 14 (Stephen Kennedy and Enda Mc Veigh, 2009). A transvaginal ultrasound scan should be performed if the diagnosis is suspected, the complete absence of an intrauterine gestational sac with a positive pregnancy test increases the probability of an ectopic pregnancy unless the pregnancy is not sufficiently advanced for the sac to be seen on ultrasound in the uterus (Stephen Kennedy and Enda Mc Veigh, 2009) An ectopic pregnancy is more likely if fluid is seen in the pelvis or an adnexal mass is seen on ultrasound (Stephen Kennedy and Enda Mc Veigh, 2009). In equivocal cases, measuring serum levels of β -hCG can help to establish the diagnosis. β -hCG levels double every 48 hours if the pregnancy is viable and intrauterine, levels tend to be static or the rise is less than double over a 48-hour period if the pregnancy is ectopic, a single level above approximately 1500 IU l⁻¹ in association with an empty uterus on ultrasound is highly suggestive of an ectopic pregnancy (Stephen Kennedy and Enda Mc Veigh, 2009). The best diagnostic test is laparoscopy, occasionally,

however, if the pregnancy is not sufficiently advanced, the ectopic pregnancy is too small to be seen in the fallopian tube, there is also a view that a laparoscopy should only be performed once a miscarriage has been excluded because of the surgical and anaesthetic risks associated with the procedure (Stephen Kennedy and Enda Mc Veigh, 2008).

Patients and Method: This is an interventional study on 100 patients which was studied at Al- Dahwi Private Hospital with ectopic pregnancy from the period January 2016 to January 2018.

RESULTS

One hundred patients were studied, the age ranged from 20 to 50 years, with a mean age of 25 years \pm 5 years, the majority being in the 3rd decade of life constituting 50 patients (50%) as showed in table 1. Also our study showed that the location of ruptured ectopic pregnancy are right tube 45 patients 45%, left tube 35 patients 35%, right ovary 8 patients 8%, left ovary 6 patients 6%, right fimbriae 4 patients 4% and left fimbriae 2 patients 2%. as showed in Table 2.

Table 1. Age distribution

Age group (Years)	No of female	%
20 – 30	50	50%
31 –40	40	40%
41 - 50	10	10%
Total	100	100%

Table 2. Location of ruptured ectopic pregnancy

Location of ruptured ectopic pregnancy	No of patients	%
Right tube	45	45%
Left tube	35	35%
Right ovary	8	8%
Left ovary	6	6%
Right fimbriae	4	4%
Left fimbriae	2	2%
TOTAL	100	100%

DISCUSSION

The major health risk of ectopic pregnancy is rupture leading to internal bleeding. Before the 19th century, the mortality rate (death rate) from ectopic pregnancies exceeded 50%. By the end of the 19th century, the mortality rate dropped to five percent because of surgical intervention. Statistics suggest that with current advances in early detection, the mortality rate has improved to less than five in 10,000. The survival rate from ectopic pregnancies is improving even though the incidence of ectopic pregnancies is also increasing. The major reason for a poor outcome is failure to seek early medical attention. Ectopic pregnancy remains the leading cause of pregnancy-related death in the first trimester of pregnancy. In rare cases, an ectopic pregnancy may occur at the same time as an intrauterine pregnancy. This is referred to as heterotopic pregnancy. The incidence of heterotopic pregnancy has risen in recent years due to the increasing use of IVF (in vitro fertilization) and other assisted reproductive technologies (ARTs). The woman may not be aware that she is pregnant. These characteristic symptoms occur in ruptured ectopic pregnancies (those accompanied by severe internal bleeding) and non-ruptured ectopic pregnancies. However, while these symptoms are typical for an ectopic pregnancy, they do not

mean an ectopic pregnancy is necessarily present and could represent other conditions. In fact, these symptoms also occur with a threatened abortion (miscarriage) in non ectopic pregnancies. Ectopic pregnancy can occur in any woman, of any age, who is ovulating and is sexually active with a male partner. Some women spontaneously absorb the fetus from the ectopic pregnancy, and have no apparent side effects. In these instances, the woman can be observed without treatment. However, the true incidence of spontaneous resolution of ectopic pregnancies is unknown. It is not possible to predict which women will spontaneously resolve their ectopic pregnancies. In our study all patients are exposed to explorative laparotomy and all are discharged well and the death rate was zero.

Conclusion

Early diagnosis and rapid surgical interference is very important to reduce morbidity and mortality.

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