Case Report

A case of seven recurrent ectopic pregnancies

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ABSTRACT

If a woman with previous ectopic pregnancy ever gets pregnant again, the risk of a repeat ectopic pregnancy is said to be 4-fold. We present a rare case of 7 recurrent ectopic pregnancies in a 39-year-old Saudi woman, together with a literature review of the reproductive performance after recurrent ectopic pregnancy.

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Ectopic nidation of a fertilized ovum is invariably fatal to the fetus and often to the mother. Although the incidence of ectopic pregnancy varies in different reports, the condition has apparently become more common in recent years. If a woman who has been treated for ectopic pregnancy conceives she runs an increased risk of having a repeat ectopic pregnancy in the order of between 9% and 17%.[1] Today earlier and more accurate diagnosis of ectopic pregnancy is possible using radioimmunoassay of the beta subunit of human chorionic gonadotropin, ultrasound and laparoscopy. With this technology, there is an increasing number of tubal gestations that are unruptured when the diagnosis is made this making a conservative medical or surgical management feasible. As conservative medical and surgical management becomes an accepted alternative to salpingectomy, more patients have a possibility for future reproductive potential we report here a rare case of 7 recurrent ectopics who had 4 times conservative management with methotrexate, 2 times with salpingostomy and once with salpingectomy.

Case Report. The patient is a 39-year-old Saudi woman whose first, and second pregnancies ended in normal vaginal deliveries 23 and 21 years ago. The third pregnancy was a 6 weeks intact ectopic pregnancy in the left tube, managed by salpingostomy carried out through laparotomy in the year 1984. Patient came with left sided lower abdominal pain. A urinary pregnancy test was positive. Ultrasound showed empty uterus with 3.0 cm of adnexal mass and no free fluid in the Pouch of Douglas. The fourth pregnancy was also an intact left ectopic occurred 2-years after first ectopic pregnancy. Pregnancy occurred spontaneously. Beta-human chorionic gonadotropin (hCG) was 1200 IU/L, ultrasound showed 3.2 cm adnexal mass with free fluid in the Pouch of Douglas. This ectopic pregnancy was managed by laparoscopic salpingostomy. Postoperative pelvic ultrasound showed normal uterus and ovaries. Hysterosalpingography revealed normal uterus with bilateral patent tubes. Laparoscopy later showed normal looking uterus, ovaries and tubes. Three years later, in her fifth pregnancy, she had another ectopic pregnancy in the right fallopian tube. This time again urinary pregnancy test was positive and β-HCG level was 900 IU/L. Ultrasound was carried out and which showed a 2.0 cm adnexal mass, empty uterus and no free fluid in the Pouch of Douglas. On the patient's request, conservative management with methotrexate was given. Two doses of methotrexate 1mg/kg body weight and

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folinic acid 0.1 mg/kg body weight was given. Patient was followed-up in the Gynecological clinic until β-HCG was almost zero. This was followed by a full term, spontaneous vertex delivery. One year later she was pregnant with her fourth right ectopic pregnancy. Beta-HCG was 700 I.U/L and transvaginal ultrasound showed again a 2.0 cm adnexal mass (**Figure 1**) with no free fluid in the Pouch of Douglas, again was managed with methotrexate and Folinic acid and was followed-up doing weekly β-HCG until it was zero. Two doses of methotrexate were given 1 mg/kg body weight on alternate days. In her eighth pregnancy following in-vitro-fertilization, she delivered twins prematurely. Both babies were admitted in Neonatal Intensive Care Unit for 2 months, discharged fit and well. Her 9th pregnancy was a 6 weeks' ectopic (n=5) in the right tube. She came to accident and emergency with 6 weeks amenorrhoea, with right-sided lower abdominal pain. Beta-HCG was carried out and the level found to be 1500 I.U/L. Transvaginal ultrasound showed 2.3 cm adnexal mass, empty uterus and no free fluid in the Pouch of Douglas. She was managed conservatively with 2 injections of methotrexate and folinic acid. After a lengthy discussion regarding the risks of another ectopic, she was put on combined oral contraceptive pills that she stopped after 3 months. She again came back with severe lower abdominal pain and 7 weeks' amenorrhoea. Urinary pregnancy test was positive. Beta-HCG was more than 19,000 I.U/L and transvaginal ultrasound showed left ectopic pregnancy (n=6), 3.5 cm in diameter, with fluid in Pouch of Douglas. She had an emergency laparotomy and left salpingectomy. Prior to laparotomy she was again counseled to remove the contralateral tube, but she again refused. One year after the sixth ectopic pregnancy she again came complaining of lower abdominal pain with uncertain dates. An ultrasound showed a 2 cm right ectopic pregnancy and β-HCG was 3000 I.U/L. Again, she was counseled to remove the remaining right fallopian tube. Again she refused, and was managed with 2 injections of methotrexate 1mg/kg body weight and 2 injections of 0.1-mg/kg-body weight of folinic acid. She was followed-up in gynecological clinic and was put on combined oral contraceptive pills. She was regularly seen in the clinic and was regularly counseled to continue oral combined contraceptive pill or to remove right fallopian tube.

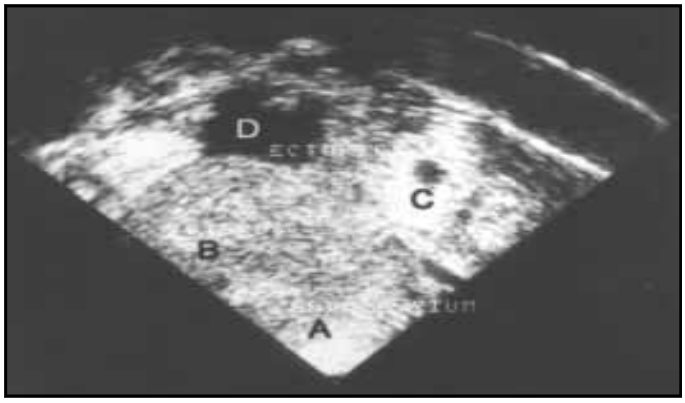

Figure 1 - Ectopic pregnancy on ultrasound examination. A - Endometrium, B - Uterus, C - Ectopic pregnancy, D - Pouch of Douglas.

Discussion. Ectopic pregnancy is an unwelcome event in any patient and even more so in communities where a high premium is placed on childbearing and large families. Therefore, in this society, most women prefer to preserve their reproductive potential, even at the expense of recurrent ectopic pregnancies. This was demonstrated in extreme in our patient when she insisted on preserving her remaining right tube, inspite of the fact that she had been through the horrifying experience of ectopic pregnancy for the seventh time. This is not only in terms of its acute adverse consequences, but also due to its effect on subsequent reproductive potential of the affected individual. Since all the patients with ectopic pregnancy are in their reproductive years, many of them are likely to be interested in future fertility.[2] It is known that ectopic pregnancy, coupled with its treatment, whether radical or conservative, can compound any damage the tube already has sustained.[3] This was confirmed in our case where the patient had salpingostomy in her first ectopic pregnancy, followed-up one ectopic in the ipsilateral and one in the contralateral fallopian tube. It is generally accepted that the occurrence of ectopic pregnancy predisposes to subsequent impaired reproductive performance which goes beyond the loss of the affected fallopian tube.[4] Furthermore, it is generally accepted that if a woman with a previous tubal ectopic pregnancy becomes pregnant again the risks of a repeat ectopic pregnancy are increased 4 fold[5] or even by as much as 30-50 fold.[2] It has been reported that 50% of patients with previous tubal ectopic pregnancy become pregnant again. Approximately 30% of these have a live birth.[3] Indeed, some studies have found fertility to be as high as 60-82% after ectopic pregnancy.[6] However, it is universally accepted that in approximately 70% of women who subsequently become infertile after an ectopic pregnancy, some form of tubal abnormality is most likely to be found.[7] It is no wonder, therefore, that the prospects of recurrence of ectopic pregnancy are increased many fold.[2,7]

In a review of the literature of pregnancies after repeat ectopic pregnancies[2,7,8] an intrauterine pregnancy rate of 17% and 48% following one and 2 repeat ectopic pregnancies was found. Following repeat multiple ectopic pregnancies; however, the rate of intrauterine pregnancy in the only study found was 16%.[1] This report emphasizes the benefit of preserving the tube after ectopic pregnancies, as the patient maintained patency of her tubes and was able to become pregnant a further 6 times with one of these resulting in live birth. Nevertheless, the high risk of recurrent ectopic

pregnancies, with all its consequences, should be borne in mind when adopting conservative management of ectopic pregnancies whether medical or surgical. In view of this, the patient was counseled for tubal ligation several times but refused every time. However, it is notable that conservative management of both tubes gave this patient a chance to have one live birth. There is no doubt that the risk of recurrence would be increasing after each ectopic pregnancy. It is essential, therefore, to await analysis of a larger series among the current cases of ectopic pregnancies being managed by conservative medical or surgical procedures. Until then, the role of these measures at preserving the fertility potential of these patients will remain controversial.

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