CASE REPORT

Expectant Management of Ectopic Pregnancy : Analysis of Four Cases

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Abstract

Expectant management of ectopic pregnancy is infrequently used. Used in a select group of patients, the result in terms of success of treatment, tubal patency , later intrauterine pregnancy are comparable to medical and surgical management. We report 4 cases of ectopic pregnancy managed expectantly in one year period and present a review of literature.

Key words

Ectopic pregnancy, Expectant management

Introduction

Of various methods for management of tubal pregnancy, expectant management is most infrequently used. With use of radioimmunoassay for serum beta human chorionic gonadotropin (HCG) and transvaginal ultrasonography (TVS), ectopic pregnancy can be diagnosed early, unruptured. This allows expectant management in selected patients who desire fertility. This is highlighted in the following four cases managed in one year.

Case 1

Mrs A.K., 32 years old para one presented to us in May 1999 at seven and half weeks amenorrhoea with pain in lower abdomen. She had a full term cesarean section 6 years back. Three years later she had dilatation and evacuation for missed abortion. Following which she developed Ashermann's syndrome and underwent hysteroscopic adhesiolysis at our hospital in march 1999. On examination vitals were stable, abdomen was soft and nontender. On pelvic examination uterus was bulky, there was a 4x3 cm tender mass in left fornix, cervical excitation was present. A provisional diagnosis of ectopic pregnancy was made and she was advised ultrasound and serum beta HCG. Transvaginal sonography showed an empty uterus, a mixed echogenic mass 3.9x3.4 cm was visualised in the left adnexa. Beta HCG was 120 miu/ml. A diagnosis of ectopic pregnancy was made and patient was kept on expectant management. A repeat beta HCG one week later was 10miu/ml and TVS showed decrease in left adnexal mass. Patient resumed periods 2 weeks later. She again conceived 6 months later, antenatal period was uneventful and patient underwent cesarean section for non progress of labour at term. A healthy baby girl weighing 3.05kg was delivered. Both fallopian tubes were healthy without adhesions or scarring, when inspected during cesarean section.

Case 2

Mrs SJ, 26 years old nulliparous woman presented to us on 3.7.00 at 5 weeks amenorrhoea with pain lower abdomen and spotting per vaginum for 2 days duration. Her menstrual cycles were normal. On examination vitals were stable, abdomen was soft on palpation. On pelvic examination uterus was normal in size, cervical movements were tender but no definite mass was felt in

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the fornices. A provisional diagnosis of ectopic pregnancy was entertained. Patient underwent TVS, which showed an empty uterus and a left adnexal mass 2.8x2.5 cm, right adnexa was normal and there was no free fluid in the pelvis. Serum beta HCG value on the same day was 880miu/ml. The values were repeated every third day and showed a falling trend. It was negative by day 15 (Fig.1). TVS was repeated serially with beta HCG and showed resolving adnexal mass. Patient menstruated on 28.7.00. She conceived again 4 months later, ultrasound confirmed an intrauterine sac.

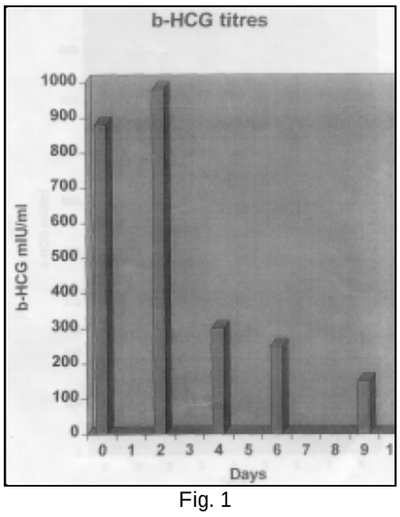

Fig. 1

Case 3

Mrs KS, 28 years old nulliparous woman presented on 28.8.00 at 8 weeks amenorrhoea with pain in lower abdomen and spotting per vaginum for 3 days. She was being treated for infertility and had received clomiphene citrate for ovulation induction. She also had a history of appendectomy 8 years back. Her menstrual cycles were regular. On examination vitals were stable, abdomen was soft and nontender. On pelvic examination uterus was bulky, fornices were free and there was no cervical excitation. Ultrasound done on same day showed some hyperechoic areas in uterine cavity, bilateral adnexa were unremarkable. Serun beta HCG on same day was 900miu/ml. Patient underwent vacuum aspiration of uterine cavity. Histopathological examination of aspirate did not reveal any villi. A diagnosis of ectopic pregnancy was made. Serum beta HCG was repeated after 2 days and it was 786 miu/ml and fell to 127 miu/ml on 5/9/00 (Fig. 2). The patient complained of persisting pain in lower abdomen hence diagnostic laparoscopy was done on 16.9.00. The uterus was normal, both tubes and ovaries were healthy and there was a spill of dye from both fimbrial ends on chromotubation. Patient menstruated on 26.9.00. She again conceived in the very next cycle, ultrasound examination revealed an intrauterine sac.

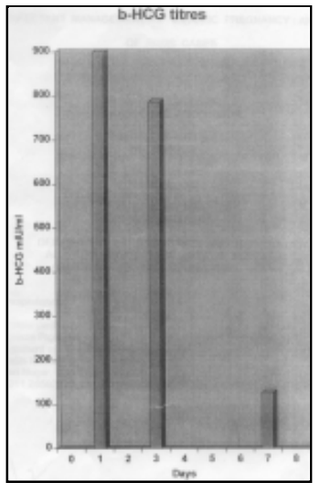

Fig. 2

Case 4

Mrs. SV, 26 years old multiparous woman presented to us on 19.4.99 with amenorrhoea of 5 weeks and one day with pain in lower abdomen and spotting per vaginum for 6 days duration. Previous cycles were regular. On examination vitals were stable, abdomen was soft and nontender on palpation. On vaginal examination, uterus was bulky, there was a small tender cystic mass in left fornix. Cervical movements were tender. A provisional diagnosis of ectopic pregnancy was kept and patient was investigated. TVS showed an empty uterus, bilateral adnexa was normal, there was minimal fluid in pouch of Douglous. Serum beta HCG sent on same day was 250miu/ml. She was put on expectant management. Patient menstruated on 10.5.99. She conceived again in

July 1999, had an uneventful antenatal period, underwent emergency cesarean section at 36 weeks gestation for fetal distress. A female baby weighing 3.2kg with Apgar score of 9/10 was delivered. Fallopian tubes were inspected at surgery, both were healthy and there were no adhesions.

Discussion

Before the advent of surgical therapy for management of ectopic pregnancy, it was noted that ectopic pregnancy was not uniformly fatal. It has been assumed for decades that spontaneous resolution of ectopic gestation occurs. Expectant management can be applied successfully in 9 – 26 % of all ectopic pregnancies after careful selection of cases (1-3). The availability of radioimmunoassay for beta HCG and transvaginal ultrasound has allowed early diagnosis of ectopic pregnancy. Close monitoring of the patient is essential with serial beta HCG, hematocrit and TVS until beta HCG is undetectable. Patients with persisting or increasing HCG levels should be offered methotrexate or salpingostomy. Unruptured tubal pregnancy can be managed expectantly, surgically or medically. Expectant management has the advantage of avoiding a laparotomy and hazards of anaesthesia. A word of caution, unexpected tubal rupture can occur even with decreasing HCG levels (4). Ectopic pregnancy can be managed expectantly without tubal damage. Cohen and Sauer (5) in a review of cases managed expectantly and found an overall success rate of 67%, tubal patency of 77 % and intrauterine pregnancy rate of 68%. The studies included in this analysis have different diagnostic and inclusion criteria. The HCG level and ectopic size cut off was different in different studies. When cases with HCG < 1000 miu/ml were analysed success rate was 80%. This is comparable to success rates with both systemic administration of methotrexate and conservative operative laparoscopy (6). It is very important to have strict inclusion criteria for expectant management for good results. The recommendations are minimal pain or vaginal bleeding, absence of evidence of tubal rupture or intraperitoneal hemorrhage (including the absence of free fluid), decreasing beta HCG levels starting at less than < 1,000 miu/ml and an ectopic mass of < 3 cm without a fetal heartbeat (5). The drawback of expectant management is long and close follow up of the patients.

We managed 4 patients expectantly. We followed the above criteria strictly, in all patients ectopic mass resolved and all subsequently conceived.

Expectant management is a reasonable option in very carefully selected patients who meet well-defined criteria. Identifying these patients would spare a large number from side effects of surgical and medical management.

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