



A CASE OF AMPULLARY ECTOPIC GESTATION FOLLOWING TUBAL RECANALISATION - FAILED METHOTREXATE THERAPY

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Abstract : Ectopic pregnancy is an important cause of maternal mortality and morbidity. Overall, 70 percent of ectopic pregnancies are located in the tubal ampulla, 12 percent in the isthmus, 11 percent in the fimbria, and 2 percent in the interstitial segment. Medical management of an unruptured ectopic pregnancy with methotrexate is a common and effective method and alternative to surgery. Early diagnosis and proper intervention by the methotrexate has brought down the morbidity and mortality. Here, we present a case of a 26 years old para 2 living 1 who had undergone tubal recanalization came to department of obstetrics and gynaecology, with missed periods. On examinations she was not pale but had a small palpable mass in the left iliac fossa. Patient was investigated with transvaginal scan and serum beta hCG and started on conservative medical management which was failed and proceeded with surgical management. Thus, we conclude a failed methotrexate therapy in ectopic pregnancy is a challenge to all clinicians. Always should have a high index of suspicion of ectopic pregnancy in recanalization patients and proper selection of the candidate.

Keyword : Recanalisation, serum beta hCG, transvaginal scan, ectopic pregnancy, methotrexate.

INTRODUCTION:

Ectopic pregnancy still remains an important cause of maternal mortality and morbidity. The incidence of ectopic pregnancy is approximately 1.5-2% of all pregnancies.¹ Risk for ectopic pregnancy is increased as much as 10-fold for women with previous ectopic pregnancy.¹ When sterilization fails, the risk of ectopic pregnancy is 15-33%.² The fallopian tube is the most common site of ectopic implantation, accounting for more than 98% of all ectopic pregnancies.¹ Overall, 70% of ectopic pregnancies are located in the tubal ampulla, 12% in the isthmus, 11% in the fimbria, and 2% in the interstitial segment.¹ Medical management of an unruptured ectopic pregnancy with methotrexate is a common and cost-effective alternative to surgery. Early diagnosis and timely institution of methotrexate has resulted in a dramatic decline in the morbidity, mortality and financial burden associated with ectopic pregnancy.³

CASE REPORT:

26 year old lady Para2 Living1 who had undergone tubal recanalisation on February 2012, in our institution came to our OBG clinic on 23/4/2014 after missing her periods. Her LMP was on 10-3-2014 with 4 weeks of amenorrhea. On examination she was stable with pulse rate - 84 beats per min and blood pressure of 110/80 mmhg. She was not pale. Abdominal examination showed left iliac fossa tenderness with a small palpable mass. There was an old laparoscopic scar. Vaginal examination was not done at that time. Urine pregnancy test was positive. Transvaginal scan which showed a complex left adnexal mass of 2.3x1.7 cm with hyper echoic rim showing high velocity with low impedance flow this was corresponding to less than 4 weeks of gestation with fetal parts, but no cardiac activity. Immediately, routine blood investigations were sent. Serum beta HCG level was elevated to 4828 miu/litre. Therefore, we started parenteral methotrexate therapy 50mg. On Day 4 review scan was done, which showed the same findings but serum beta HCG level was increased to 7854 miu/litre. Second dose of methotrexate was given. On Day 7 patient complained of spotting per vaginum and transvaginal scan was done, which showed cardiac activity (124 beats/min) with fetal parts and mean sac diameter : 8.2 mm. A diagnosis of active ectopic gestation was made and she was counseled for emergency laparotomy. Segmental resection of the left tube was done. Intra-operative findings were: left ruptured ampullary ectopic gestation with infiltration into the omentum. 3 days later, serum Beta HCG level was decreased to 475.3 miu/litre. After 1 week she was discharged, and the serum beta HCG level further decreased to < 10 miu/litre.

fig 1 shows-rupture of fallopian tube.

fig 2 shows- infiltration of chorionic villi into the omentum.

fig 3 shows-high power view(40X) of the chorionic villi.

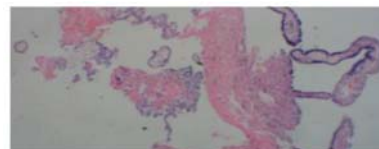


Fig 1

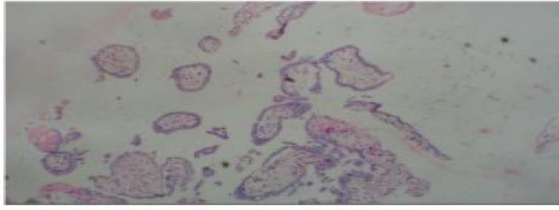


fig 2

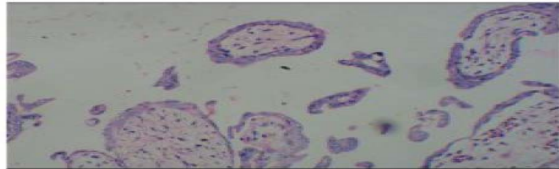


fig 3

DISCUSSION:

This case was cited here, as a case of medical management failure in ectopic pregnancy after recanalization surgery. The cases reported so far are not similar to the present one. The criteria for methotrexate therapy had been fulfilled including, size of the gestational sac, absence of cardiac pulsations and the hemodynamic stability of the patient. There was no fall in serum beta HCG level >15% with the first dose of methotrexate therapy after 48 hours.¹ This was an indication for the second dose of methotrexate therapy. Astonishingly, there was no fall of beta HCG after the second dose and cardiac pulsations appeared. The possible clinical correlation could be, the inaccessibility of the drug to the growing embryo. This could be explained by the intra-operative finding in which, the trophoblastic proliferation was invading the omentum. The vascular supply to the embryo could have been cut off by the omental entanglement. Already the reported cases from elsewhere had showed the inefficacy of the drug in attaining a complete reduction in the serum beta HCG values only.⁴ But, here it was evident that the growing embryo was unaffected by the treatment. All the more equal to non-interference with any modality of the treatment.

CONCLUSION:

All the patients after recanalization should be supervised with high index of suspicion for ectopic gestation when they report with missed periods with a positive urine pregnancy test. Even when all the criteria are satisfied for methotrexate therapy, there is risk of failure of methotrexate therapy even after repeated use of the drug.

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