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Case Report

Unruptured tubal ectopic pregnancy with very high levels of beta HCG: a rare case report

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ABSTRACT

When the fertilized ovum is implanted outside the endometrial cavity, it is termed as ectopic pregnancy. The most common site being fallopian tube. The commonest site to be affected is ampulla of the fallopian tube followed by isthmus. Fimbrial and interstitial are rare sites for ectopic pregnancy. The incidence of ectopic pregnancy is increased over couple of decades. Important causes include PID, previous history of ectopic pregnancy, h/o tubal reconstructive surgery, h/o artificial reproductive techniques like IVF, use of IUD's, h/o of tubal ligation etc. Fallopian tubal ectopic usually ruptures at duration of 7-8 weeks gestation. A ruptured tubal ectopic pregnancy can lead to massive haemorrhage leading to tachycardia, hypotension endangering life, which requires emergency surgical intervention & transfusion blood and blood products. Ectopic pregnancy with beta HCG <5000 IU/L, Gestational sac <4 cm, & vitally stable, can be managed medically with methotrexate, whereas higher levels of beta HCG, Gestational sac > 4 cm with live ectopic pregnancy and vitally unstable becomes obstetric emergency which should be managed surgically. Thorough clinical examination, use of ultrasonography and beta HCG levels, helps in timely diagnosis and management of ectopic pregnancy which can be lifesaving. This is a rare case report of unruptured live fimbrial ectopic pregnancy with very high levels of beta HCG (>50,000 mIU/ml), which was managed surgically.

Keywords: Ectopic, Unruptured, Fallopian tubal pregnancy

INTRODUCTION

Ectopic pregnancy is defined as the condition when the fertilized ovum gets implanted outside the uterine cavity.[1] The most common site being fallopian tube. The commonest site to be affected is ampulla of the fallopian tube. The incidence of ectopic pregnancy is increased over couple of decades.[2,3] Important causes include PID, h/o of ectopic pregnancy, h/o tubal reconstructive surgeries, h/o artificial reproductive techniques like ART, use of intrauterine contraceptive devices, and h/o of tubal ligation.[4]

Fallopian tubal ectopic usually ruptures at duration of 6-9 weeks gestation. A ruptured ectopic pregnancy can lead to massive hemorrhage endangering life, which requires emergency surgical intervention and transfusion of blood and blood products.[5] Thorough clinical examination, use of ultrasonography, beta HCG levels, helps in timely diagnosis and management, which can be lifesaving.[6]

CASE REPORT

A 39 years old female came with complaints of 2 months of amenorrhea. Her UPT was done, which was positive. She was gravida 3 para living 2 with 9 weeks 5 days of gestation as per her LMP. On general examination, patient was vitally stable. On per abdomen examination, abdomen was soft, nontender. On per speculum examination, there was no bleeding. On per vaginal examination, uterus was

of normal size, left fornicial mass of 3×3 cm. felt in left adnexa which was tender. Cervical motion tenderness was absent. USG was done which was suggestive of Uterus was of normal size, ET was 7 mm. Gestational sac of 3.8×3.6 cm was seen in left adnexa with cardiac activity. Features suggestive of left adnexal live ectopic pregnancy. Beta HCG value was 51,780 IU/ml.

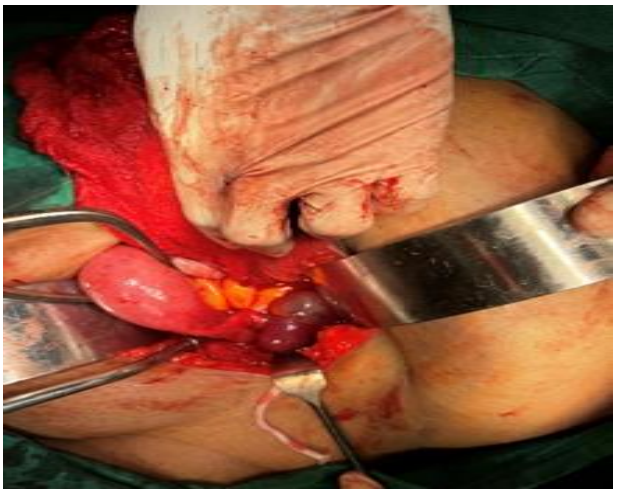

Figure 1: Intra-op finding unruptured ectopic pregnancy with hematoma adjacent to it.

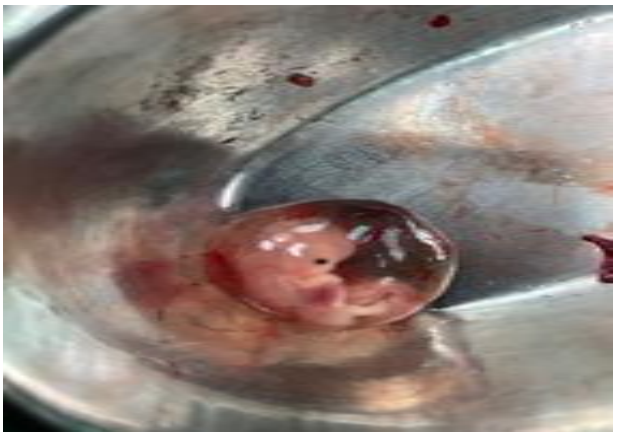

Figure 2: Unruptured fimbrial ectopic pregnancy.

Patient was posted for emergency exploratory laparotomy. Her pre-op hemoglobin was 9.8 gm/dl, 1PCV was issued pre-operatively. Intra-operatively there was 4×4 cm, unruptured left fimbrial ectopic pregnancy with 3×3 cm, hematoma adjacent to it. No hemoperitoneum. Left salpingectomy was done. Follow -up with weekly beta HCG levels was done and subsequently it became zero.

DISCUSSION

Ectopic pregnancy is an important cause of maternal morbidity and mortality in first trimester of pregnancy.[7] In fallopian tube, commonest site to be affected is ampulla.[8] A study conducted by Haddaden et al, showed a finding of unruptured tubal ectopic pregnancy of 10 weeks 6 days gestation with beta HCG value of 39,947 IU/L which was managed surgically, similar to my case. Clinically diagnosis of ruptured ectopic is easy as compared to unruptured ectopic pregnancy.[9] A study conducted by Biswas et al, showed unruptured tubal ectopic pregnancy of 14 weeks gestation which was managed surgically, comparable to my case. Accurate diagnosis of ectopic pregnancy can be made by using combination of transvaginal ultrasonography and serum beta HCG.[10]

A study conducted by Yuce et al showed medical management of unruptured ectopic pregnancy with beta HCG 37, 280 IU/L with single dose methotrexate, which was successful ultimately beta HCG became zero.

So, in most of cases where beta HCG is high and size of ectopic is big, surgical management is preferred due to high risk of subsequent rupture and increased maternal morbidity and mortality. Medical management of ectopic pregnancy or conservative tubal surgeries like salpingostomy is considered when ectopic is diagnosed at early gestational age and beta HCG value is less than 3000 IU/L.[11]

CONCLUSION

Ruptured ectopic pregnancy can lead to massive hemorrhage, which can be life threatening. Emergency surgical intervention, transfusion of blood, blood products decrease maternal morbidity and mortality. This is a rare case with nearly 9 weeks unruptured tubal ectopic gestation with very high levels of beta HCG.

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REFERENCES

1. Nath J, Mishra A, Verma V, Gupta S. A 5-year Study on Ectopic Pregnancy in North India. Sch Int J Obstet Gynec, 2021;4(3):49-54.
2. Rose IA, Ayodeji OO, Olalekan OB, Adebajo S. Risk factors for ectopic pregnancy in Lagos, Niger. Acta Obstetri Gynecolog Scandinavica. 2005;84(2):184-8.
3. Elson CJ, Salim R, Potdar N, Chetty M, Ross JA. On behalf of the royal college of obstetricians and gynaecologists. diagnosis and management of ectopic pregnancy. BJOG. 2016;123(13): e15-e55.
4. Yadav A, Prakash A, Sharma C, Pegu B, Saha MK. Trends of ectopic pregnancies in Andaman and

Nicobar Islands. Int J Reprod Contracept Obstet Gynecol. 2017;6(1)15-9.
5. Andola S, Kumar R, Desai RM, Krutika SA. Study of Risk factors and treatment modalities of ectopic pregnancy. J Family Med Primary Care. 2021;10(2):724-9.
6. Meyur R, Sadhu A, Mondal H, Das R. A study of tubal ectopic pregnancy based on the histopathology of fallopian tubes in the age group of 20-35 years. Int J Med Res Rev. 2020;8(1):92-6.
7. Grimes DA. The morbidity and mortality pf pregnancy. Am J Obstet Gynecol. 1994;170(5pt20):1489-94.
8. Bouyer J, Coste J, Fernandez H, Pouly JL, Job Spira N. Sites of ectopic pregnancy; a ten-year population-based study of 1800 cases. Hum Reprod. 2002;17(12):3224-30.
9. Marion LL, Meeks GR. Ectopic pregnancy: History, incidence, epidemiology and resk factors. Clin Obstet Gynecol. 2012;55(20):271-4.
10. Kadar N, de Vore G, Ramcro R. Discriminatory hcg zones; its use in sonographic evaluation of ectopic pregnancy. Obstet Gynecol. 1981;58920:156-61.
11. Josie L Tenore. Ectopic pregnancy. Am Fam Physician. 2000;61(4):1080-8.

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