RADIOLOGICAL ASSESSMENT OF A LIVE ABDOMINAL PREGNANCY USING ULTRASOUND AND 3T MRI: A RARE CASE REPORT

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ABSTRACT

Abdominal pregnancy is extremely rare and easily missed in routine obstetric practice. We present a case of primigravida who presented to obstetric emergency with lower abdominal pain and slight bleeding per vagina. On ultrasound (US) and 3T MRI, 16 weeks primary abdominal pregnancy as per Studdiford's criteria was diagnosed. Due to high risk of rupture and other possible complications, pregnancy was terminated on medical ground without any postoperative complications.

CASE REPORT

A 20 years, primigravida was referred to obstetric emergency from a local clinic as a case of ectopic pregnancy. She presented with lower abdominal pain and slight bleeding per vagina with positive urine pregnancy test. Her pulse and blood pressure were within normal limits with no significant past medical or surgical history. Her recent haemoglobin was 10 g/dl. She was referred to Radiology Department for an US. On US we found an empty intrauterine gestational sac with irregular outline, possibly pseudo sac (Fig. 1a). Another gestational sac was noted which was extrauterine harbouring a live fetus (Fig. 1b) of average gestational age corresponding to 16 weeks 3 days on fetal biometry. Both ovaries were visualised separately with normal fallopian tubes and placenta appearing to be implanted over omentum and mesentery. A 3 T MRI was performed to delineate better anatomy. After proper informed consent and precautions, fetal MRI done at 3T. Empty uterus noted with thickened endometrium due to pseudo sac on axial FIESTA...
and adjoining muscles were separate. Due to high risk of rupture on continuing the pregnancy, after proper counselling she had medical termination of pregnancy. Surgical findings correlated...
Diagnosis of intraabdominal pregnancy is of high significance due to high risk of maternal mortality rate from massive haemorrhage. In this case we diagnosed primary abdominal pregnancy using US and 3T MRI according to Studdiford’s criteria which include:

1. Normal fallopian tubes and ovaries
2. No uteroplacental fistula
3. Attachment of the placenta exclusively to the peritoneal surfaces in early pregnancy to exclude any secondary implantation.

In recent years there has been an increase incidence of ectopic pregnancy and primary reasons are use of oral contraceptives, intrauterine devices, history of pelvic inflammatory diseases, sexually transmitted diseases, etc. In our patient there was no such contributing cause for ectopic pregnancy. Ultrasound is the initial investigation in obstetrics which can diagnose abdominal pregnancy but for better delineation of anatomy, use of 3T MRI did help in precise localization and better surgical approach with better surgical outcome.

**Discussion**

**Conclusion**

Ultrasound and 3T MRI findings are complementary to each other in diagnosing primary abdominal pregnancy according to Studdiford’s criteria and help
in precise localization and better surgical approach with better surgical outcome.

Competing interests
The authors claim that they have no personal or financial interest that may have inappropriately influenced them in writing this article.

References

