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Ruptured tubal pregnancy masquerading as poisoning

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ABSTRACT

Abstract

An interesting case of ruptured tubal pregnancy, brought to the mortuary of the Regional Institute of Medical Sciences, Imphal for autopsy as a case of poisoning is presented in this paper. The treatment was delayed by a couple of hours as the deceased was an unmarried girl, and the possibility of ruptured ectopic pregnancy was sidelined. The diagnosis was established only after the postmortem examination.

Keywords: Ruptured tubal pregnancy, poisoning, sudden death

INTRODUCTION

The sudden death of a comparatively healthy person following some brisk symptoms of illness like sudden onset of pain in the abdomen and vomiting after ingestion of any substance often arouses the suspicion of poisoning to every individual. The possibility of other systemic conditions is often sidelined, and the timely diagnosis and medical intervention for such a condition are often delayed. Ruptured tubal pregnancy is one such condition that can prove fatal if it is not treated promptly with surgical intervention. Ectopic pregnancy is also frequently misdiagnosed, and is one of the most common causes for malpractice claims made against primary care physicians[1]; but the possibility of ruptured ectopic pregnancy in a young unmarried girl will be the least considered diagnosis for any medical practitioner. The possibility of poisoning often overrules the possibility of such a condition in some of the cases, thereby leading to a grave outcome.



Figure 2. Blood escaping out of the peritoneal cavity

CASE REPORT



Figure 1. Body showing marked generalized pallor

A 21-year old unmarried girl's body was brought to the mortuary of the Regional Institute of Medical Sciences, Imphal on the 25th December 2002 as a case of death due to suspected poisoning. The history given by the investigating officer and the relatives of the deceased was that in the late afternoon of the 24th December 2002, she went to the house of her friend, where she had some fruits; and she came back home, complaining of pain in the abdomen. She vomited a couple of times and passed some watery stools. The abdominal pain worsened and she was frantically tossing on the bed. Late in the evening of the same day, she was taken to the Casualty dept. of the Regional Institute of Medical Sciences, Imphal as a case of suspected poisoning; but on reaching there, she was declared brought dead.

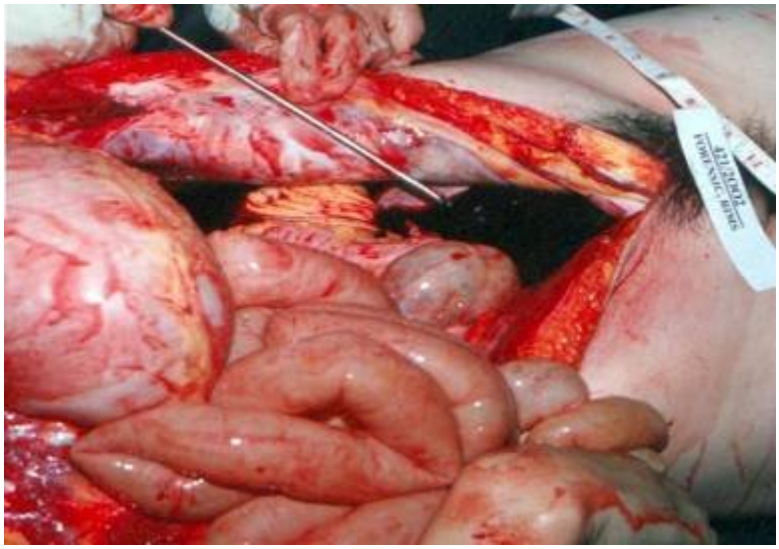


Figure 3. Blood clot in the pelvic cavity

ON EXAMINATION

External Findings

The body measured 163 cm. in length and weighed 51 Kg. It had a fair complexion, fair nutrition and was of average build. Rigor mortis developed all over the body. Faint post mortem staining was present on the back and fixed. Marked generalized pallor was present (Figure No.1), and the abdomen appeared distended. No external injuries were seen on the body.

Internal Findings

The cranial and thoracic cavities were grossly normal and showed no obvious pathology except for marked pallor of the internal organs. The heart was also pale and empty.

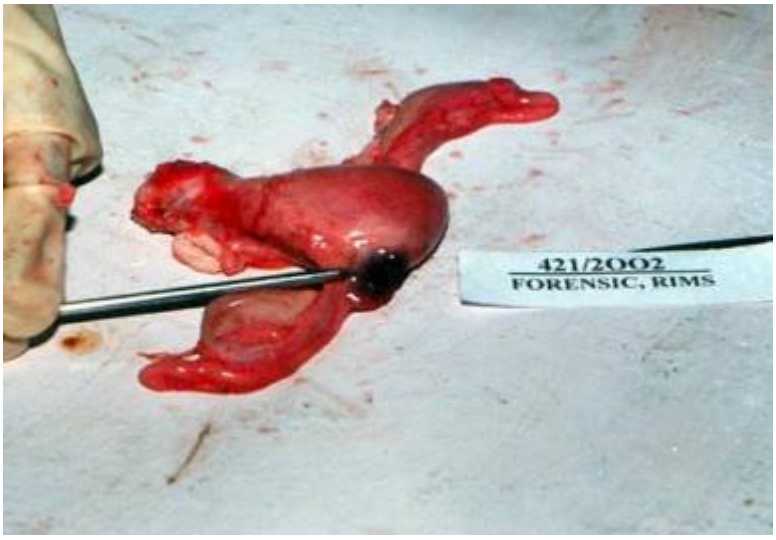


Figure 4. Ruptured tubal pregnancy in the isthmus of the left fallopian tube

On opening the abdomen, the peritoneal cavity was found containing about 2 liters of blood (Figure No. 2). Blood clot weighing about 500 gm was also present in the pelvic cavity (Figure No.3). There was marked pallor of the abdominal viscera. The uterus was enlarged measuring 8cm x 5cm x 3cm. with a thickened endometrium. The isthmus of the left fallopian tube was enlarged and rounded in

shape, 2.5 cm x 1.5 cm. and ruptured at the site with a dark brown discoloration (Figure No.4). The ovaries appeared grossly normal. The stomach contained about 100 ml. of whitish fluid mixed with some food particles.

Histopathological examination

The endometrium showed arias stella reaction. The cut section of the ruptured isthmus of the left fallopian tube showed degenerated trophoblastic villi confirming the tubal pregnancy. The ovaries showed corpus luteum.

DISCUSSION

Tubal pregnancy is the commonest type of ectopic gestation, and the ampulla of the tube is the commonest site. The frequency of ectopic gestation is 1 in 150 to 500 pregnancies[2]. The trophoblast develops in the fertilized ovum and invades deeply into the tubal wall. Estrogen and progesterone produced from the corpus luteum change the secretory endometrium into decidua. The uterus enlarges and becomes soft. The tubal pregnancy does not usually proceed beyond 8-10 weeks due to the lack of decidual reaction in the tube, the thin wall of the tube, the inadequacy of tubal lumen, bleeding in the site of implantation as trophoblast invades. Thus the tissues of the tubal wall form a gestation sac for the growing ovum, and haemorrhage may occur in the tubal lumen or may occur into the peritoneal cavity or into the layers of the broad ligament. Haemorrhage and shock produced by ruptured ectopic pregnancies are the leading cause of maternal mortality in the first trimester[2], and ruptured ectopic pregnancy is a leading cause of maternal mortality even in the United States.[3]

Even though various modalities of treatment are available in the present era, the misdiagnosis of such a case may often prove fatal. In the present case also, the deceased was an unmarried girl and she herself was not aware of the pregnancy and she kept on insisting that she ate something in her friend's house, which led to the arousal of suspicion of some kind of poisoning in the minds of her relatives. Her treatment was delayed by a couple of hours, because they were trying to manage her condition at home and by the time they brought her to the hospital, it was already too late.

CONCLUSION

Although there are various causes of acute abdominal pain and vomiting, it is always safer to keep in mind about the possibility of ruptured ectopic pregnancy in a girl of child bearing age presenting with such symptoms.

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(Editor's Note: Professor Fimate, one of the co-authors of this paper was featured as a Doyen of Forensic Medicine in our Vol. 1, No. 2 (July-December 2000) issue. Readers wanting to read that piece may want to click here.