UNRUPTURED TUBAL PREGNANCY AT TERM

(Report of A Case)

by

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The rarity of tubal pregnancy going to term unruptured is attested to by the fact that only about fifty such cases have been reported to date. Because of this infrequent occurrence and the difficulty in diagnosis and management, a case is reported with a short discussion.

CASE REPORT

C.R., 27 year old Korean female, gravida 1 para 0. L.M.P.—16.1.63, E.D.C.—23.10.63, was admitted for the evaluation and possible termination of pregnancy.

The patient was first seen in the office of a private doctor on 29th March 1963. The physical examination was normal. Blood pressure was 88/48. The pelvic findings were a soft cervix and a smooth, ovoid, 8-10 weeks' gestational size uterus. In the first trimester of pregnancy, the patient had marked nausea, vomiting and anorexia. She did not give any history of abdominal cramps or pain. The patient was regularly followed at monthly intervals. On 2nd July 1963, the patient felt foetal movements but no foetal heart sounds were heard. On 31st July 1963 the foetal heart sounds were heard in the left lower quadrant, regular in character. On 30th August 1963, her blood pressure was 120/80, there was slight oedema, 1+ albuminuria and she had gained 5½ pounds in one month. She was placed on a toxaemic regimen and was given diuretics daily for one week. On 20th September 1963, a diagnosis of a transverse lie was made and the presenting part was outside the pelvis. Vaginal examination at that time revealed the cervix to be long, soft and closed. On 18th October 1963, the uterus was full term in size and the foetal heart sounds were present. On 25th October 1963, the foetal heart sounds were not heard. The patient did not feel any foetal movement for the past 24 hours. The foetal parts were easily palpable. As the patient did not go into labour, fibrinogen levels were done at weekly intervals and were within normal limits.

On 29th November 1963, the patient was admitted to the hospital for the first time with the diagnosis of early labour and a dead foetus. Pelvic examination revealed the cervix to be long, thick and barely admitting a fingertip. The presenting part was high and still in transverse lie. Speculum examination showed some blood clots in the vagina. Blood count and urine analysis were normal. Fibrinogen index test showed fibrinogen level above 150mg. %.

The patient was observed for two days and discharged undelivered to await onset of labour. The patient was readmitted on 3rd January 1964. The patient gave a history of vaginal spotting on and off and pain in the lower abdomen since her discharge from the hospital. She also noticed decrease in the size of her abdomen. Physical examination was essentially normal. The uterus was three fingers above the umbilicus and the foetus was in the transverse lie position. Pelvic examination revealed a 26 weeks' gestational size uterus. Posterior to this, there was another mass which had the outline of a non-gravid uterus. To evaluate the posterior mass, a

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hysterosalpingogram was done on the following day. The result was inconclusive at that time. In view of foetal death and good fibrinogen level, it was decided to induce labour by Sparteine sulfate. The patient received four doses of Sparteine sulfate, 150 mg. intramuscularly at one hourly intervals for three consecutive days. No uterine contractions or vaginal bleeding were noted. Since there was no response to Sparteine sulfate induction, it was decided to terminate the pregnancy by laparotomy with the diagnosis of a possible extrauterine pregnancy.

On 7th January 1964, the patient underwent an exploratory laparotomy under general anaesthesia. The abdomen was entered through a midline infra-umbilical incision revealing a large mass filling the entire pelvis and extending up to three fingers breadth above the umbilicus. Gentle exploration of the mass revealed it to be connected to a small uterus on the posterior and left side. The left tube and ovary were normal. This mass appeared as a horn of the uterus. It was presumed to be the second horn of the uterus. A bladder flap was developed and pushed downwards. An incision was made in the mass and a macerated term sized female foetus weighing four pounds was delivered. At this time, it became apparent that the mass was a tube and the glistening mass on its superior surface was probably the atrophied ovary. At the fimbriated end of the tube, there were adhesions between the omentum, large and small bowels and the mass. It was thought that this mass was a ruptured tubal pregnancy implanted in the intestinal wall. However, with minimum blunt dissection, a plane of cleavage was obtained and the large and small bowels were separated from the mass with ease. There was no evidence of break in the wall of the sac or in the intestine. Being satisfied that this was an intact dilated tube still containing a very adherent placenta postero-inferiorly, it was decided to do a right salpingo-oophorectomy. The right ovary had for all practical purposes been destroyed by the presence of the enlarging tube. This ovary was not involved in the formation of the sac but was nonetheless removed. This mass was shelled out without any evidence of adhesions to the posterior abdominal wall. The abdomen was closed in layers. The postoperative course was uneventful and the patient was discharged on the tenth postoperative day in good condition.

Histopathology

Gross: The specimen is a roughly spherical sac measuring approximately 15 cm. in diameter. The external surface is studded with numerous haemorrhagic, fibrous and fibroadipose tags. Much of the external surface has a smooth glistening appearance. Approximately two-thirds of the wall of the sac consists of firm, thick tissue whereas the remainder of the sac wall consists of relatively thin inelastic membrane. On the external surface corresponding to the thicker portion of the sac wall, there is an irregular, slightly elevated, firm, grey-white and yellowish-white zone measuring 2 x 6.5 cm. The inner surface of the sac is lined by a smooth glistening translucent yellowish-green surface. Foetal membranes can be easily stripped from the inner surface of the sac. The thinned portion of the sac wall consist of tough grey-white fibrous tissue measuring 0.15 cm. in thickness. The thick portion of the sac wall is the site of firm adhesion of the placenta, measuring 15 cm. in diameter and 2.5 cm. in thickness. The insertion of the umbilical cord is extremely eccentric, approaching the margin of the placenta. Section through the placenta reveals grossly normal structures. The placenta is densely adherent to the wall of the sac. Sections that passed through the grey-white nodular elevations previously described revealed uniform tough grey-white tissue without gross evidence of ovarian structure.

Miscrosopic: (1) Ectopic (tubal) pregnancy with antepartum death of the foetus, (2) Macerated term foetus, (3) Necrosis of the placenta, (4) Dilatation of the Fallopian tube, (5) Muscular hypertrophy and hyperplasia of Fallopian tube.

NOTE: The presence of muscularis, typical of Fallopian tube, and isolated fragments of epithelium lining the gestational sac clearly suggest that the pregnancy occurred in the Fallopian tube.

Discussion

Extrauterine pregnancies can be broadly divided into four categories;

abdominal ovarian, tubal and intraligamentary. For academic purposes this could be subdivided. To justify the diagnosis of intratubal near term or term unruptured pregnancy, the following criteria should be fulfilled: (1) That complete extirpation of the foetal sac and the products of conception be achieved by salpingectomy. (2) That there is no gross or microscopic evidence of tubal rupture. (3) Ciliated columnar epithelium be demonstrated at some points on the inner lining of the sac. (4) That smooth muscle be found in the sac wall at multiple points and considerable distance from the normal undilated part of the tube. In our case, all these criteria have been fulfilled.

An advanced extrauterine pregnancy can be diagnosed only if the possibility of it is kept in mind in a case in which the pregnancy presents unusual features. In our case, if the diagnosis of extrauterine gestation was anticipated at term we might have had a live baby. In the case reported with the presence of a persistent transverse lie, no response to oxytoxic drug induction and the presence of a thick, long, closed cervix, the diagnosis of extrauterine gestation could have been anticipated. When a dead foetus is retained for as long as two months, the most likely diagnosis is extrauterine pregnancy.

The definite diagnosis of term tubal pregnancy is nearly always made at laparotomy and our case is no exception.

Reviewing the hysterosalpingogram later, a diagnosis of extrauterine pregnancy was entertained. Hysterosalpingography can be of great help in establishing a diagnosis of extrauterine pregnancy in the presence of a dead foetus and in the absence of infection.

The treatment of intratubal pregnancy is simple. The foetus, placenta and the sac can be removed en masse at the time of laparotomy by doing a simple salpingectomy, whereas in the case of pregnancy without a sac (abdominal) the placenta may have to be left behind with attendant complications.

The site of the placenta in our case is the inferior aspect of the tube which is the most vascular site. This is in agreement with the view of Schumann (1921) who considers this as the only feasible site if the pregnancy is to advance to later months.

Summary

1. A case of term unruptured tubal pregnancy is described.
2. The pregnancy was terminated by salpingectomy.
3. All the criteria for a term unruptured tubal pregnancy were met.

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