# A case of Combined Intra-uterine and extra-uterine pregnancy

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## SUMMARY

A case is described of combined intra-uterine and extra-uterine pregnancy complicated by laparotomy for a leaking left ampullary tubal ectopic pregnancy at 6-7 weeks gestation with continuation of the intra-uterine pregnancy to 37-38 weeks gestation and the spontaneous vaginal delivery of a surviving normal female infant.

#### INTRODUCTION

Combined intra-uterine and extra-uterine pregnancy is a rare condition (Felbo and Fenger, 1966).

The first description of a case is attributed to a post mortem study by Duverney in 1708.

A case of advanced simultaneous intra-uterine and abdominal pregnancy has recently been reported from Zambia (Das, 1975).

## CASE REPORT

The patient was a 26 year old Caucasian woman, whose only previous pregnancy was a normal twin confinement at 35 weeks gestation in 1973. There was no family history of multiple pregnancy. Previous abdominal surgery had been an appendicectomy in 1962 and a laparotomy for division of adhesions in 1969.

On November 25, 1974, after 6-7 weeks amenorrhoea, she was admitted by a local general practitioner with a history of 4-6 hours constant left lower abdominal pain described as severe. A pregnancy test was known to be positive. There had been no syncopal episode, no shoulder tip pain and no vomitting, dysuria, diarrhoea or vaginal bleeding.

She was found to be a very nervous woman, mildly obese and difficult to assess clinically. Her

general condition was good. She was afebrile, the pulse was 80 beats per minute of good volume and regular rythm and the blood pressure was 120/75 mmHg. There was a lower abdominal midline scar. There was no abdominal distension. Mild lower abdominal tenderness was present on palpation, maximal in the left iliac fossa but without guarding. The presence or absence of rebound tenderness was impossible to elicit due to the nervous state of the woman.

With reassurance a pelvic examination revealed no uterine bleeding or vaginal discharge, a blueish closed cervix, a soft anteverted uterus of 6–8 weeks gestational size consistent with the length of amenorrhoea, no adnexal masses and minimal vaginal forniceal discomfort. In the anaesthetic induction room, following sedation with Valium 10 mg intravenously, a culdocentesis was negative. The pelvic findings were confirmed.

#### LABORATORY INVESTIGATIONS:

Hb 14.2 gm%, P.C.V. 46%, W.B.C. 7400/mm<sup>3</sup> (Neutrophils 71%, Lymphocytes 21%, Monocytes 8%), Blood group O Rh POSITIVE, E.S.R. 19 mm/hr (Westergren), urine microscopy normal.

She was provisionally diagnosed as a normal 6-8 weeks intra-uterine pregnancy with a left ovarian complication due to either a leaking cyst or torsion from adhesions. An ectopic gestation was still not definitely excluded. Conservative management was decided upon initially with rest, observation, sedation and non-narcotic analgesia. The pain was a dull pelvic ache and was not causing distress. The clinical picture remained unchanged, except for some difficulty with

micturition, for 3 days and when brown vaginal spotting commenced with a repeated positive pregnancy test, it was felt that laparotomy was mandatory to exclude an ectopic gestation.

Laparotomy was performed on November 30 via a left paramedian lower abdominal incision. There was a small amount of old dark blood covering the pelvic peritoneum originating from the intraperitoneal ostium of the left fallopian tube which had not ruptured. There was left ampullary dilation with a haematosalpinx. A left salpingectomy was performed and the old blood removed. The left ovary, right fallopian tube and right ovary were normal. The uterus was anteverted, soft, vascular and 6-8 weeks gestational size. An intra-uterine pregnancy was suspected. There were no pelvic adhesions and the abdomen was closed. She was well sedated with morphia for 48 hours and had an uneventful post-operative course. Vaginal snotting ceased and the pregnancy test was positive one week post-operation.

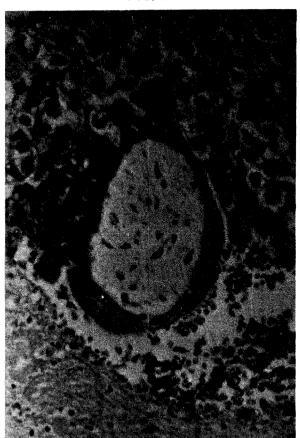
Histology confirmed the operative diagnosis of a leaking left ampullary tubal ectopic pregnancy (figures 1 and 2).

# FIG. I



Photomicrograph of Fallopian tube with thinned out wall and containing haemorrhage and trophoblastic tissue with well formed chorionic villi.

## FIG. II



High power of Fallopian tube wall with intraluminal haemorrhage plus trophoblastic tissue with a chorionic villus, H.E. × 250.

The uterus continued to grow consistent with the period of amenorrhoea. There was a threatened abortion at 20 weeks with pelvic pain and vaginal spotting, which settled with rest and sedation and an episode of threatened premature labour at 31 weeks associated with a urinary infection due to staphylococcus aureus, which settled with rest, sedation and ampicillin.

She had a normal labour and delivery (with an episiotomy) of a living female infant at 37-38 weeks gestation. The birth weight was 2.41 kg and the infant progressed normally with breast feeding.

## DISCUSSION

Detailed reviews on the subject are those of Novak (1926), Gemmell and Murray (1933), Mitra (1940), Vasicka and Grable (1956) and Felbo and Fenger (1966).

Combined intra-uterine and extra-uterine pregnancy may occur spontaneously or following ovulatior induction with clomiphene (Payne et al., 1971) and and gonadotrophins (Robertson and Grant, 1972). The extra-uterine pregnancy is commonly situated in the fallopian tube. Most cases give rise to symptoms early in pregnancy, often when the extra-uterine pregnancy ruptures. As in this case, the intra-uterine pregnancy may survive this and the laparotomy and continue to near term or term (Morse, 1939; Ludwig, 1940; Schaeffer, 1947; De Voe and Pratt, 1948; Sickenberger, 1952; Rannels, 1953, Winer et al, 1957; Ashley and Lloyd, 1966; Corrigan, 1967; Barnes et al, 1968; Kamal and El-Tannir, 1968.

Less common, but more dangerous, are the cases which do not cause symptoms until the second half of pregnancy (Gemmell and Murray, 1933; Voigt and Chalk, 1971).

Two living babies delivered at or near term have been described (Novak, 1926; Fejer and Henry, 1949; Gilliland, 1949; Burke, 1951; Loxton, 1953; Nandi 1953; Theron, 1954; Vasicka and Grable, 1956; Felbo and Fenger, 1966; Das, 1975). The extrauterin baby is delivered by laparotomy and is not always deformed.

A past history of multiple pregnancy is not a common feature described in the literature. Multiple ovulation obviously facilitates the occurrence of this condition as shown by the cases following ovulation induction with clomiphene and gonadotrophins. Both pregnancies appeared of the same duration in this case.

The case highlights the difficulties in the diagnosis of ectopic pregnancy. The laparoscope was not available, but it would have been contra-indicated with the history of previous abdominal surgery for adhesions. The value of culdocentesis is controversial (British Medical Journal 1970; Lucas and Hassim, 1970). In the case described it must have been performed at the time of haematosalpinx formation with possibly only localised peri-tubal spill of blood. The case supports the view of those who contend, the laparoscopea side, that immediate laparotomy is indicated more on historical suspicion of ecopic gestation than clinical signs and investigations.

The diagnosis of this rare condition will only be made if there is consideration given to it. Where there is a suspected ectopic gestation, uterine dilatation and curretage should be avoided. The endometrial histology is of no diagnostic help (Lucas and Hassim, 1970) and a normal intra-uterine pregnancy may be aborted.

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