

others the cell surfaces were covered apparently by swollen, stunted microvilli of about $0.3\ \mu$ diameter.

As in control jejunum, holes or openings could also be seen in these specimens (Fig. 6), and may represent the orifices of subjacent goblet cells. Sometimes, as in Fig. 7, a plug of mucus-like material could be seen at these openings. The corrugations which had been seen running round the villi in control small intestine were not evident in the coeliac biopsies.

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Medical Memoranda

Primary Peritoneal Pregnancy

Brit. med. J., 1968, **4**, 96-97

For many years there has been disagreement about the validity of primary peritoneal pregnancy. Some authorities believe that all peritoneal implantations are secondary to ovarian or ruptured tubal pregnancies, but most would agree with Jeffcoate (1967) that while the majority are secondary a few primary implantations have probably occurred. Since Studdiford (1942) suggested criteria for primary peritoneal pregnancy, cases have been reported occasionally which claim to fulfil these criteria—for example, Baldwin (1954), Myles (1954), Ahnquist and Lund (1955), Rodriguez and Siegel (1960), Baccarini (1961), Tow (1961), and Kemp (1964). In a review of the literature Kroupa and Bleicher (1955) found 15 cases which were acceptable, but in a review of cases at the Charity Hospital, New Orleans, Beacham *et al.* (1962) concluded, "never have we said that the primary type cannot occur but we have pointed out that it is very rare." The evidence is now becoming increasingly strong, and a case is reported here which strengthens the conviction that primary peritoneal implantation does in fact occur.

CASE REPORT

A 20-year-old Chinese woman was admitted to the casualty department of the West London Hospital on 13 August 1967 with an eight-hour history of intermittent lower abdominal pain, without vomiting, but with slight vaginal bleeding for two days. Her previous period, lasting five days, finished 21 days earlier; up to that time her periods had been regular.

On initial examination she was not shocked but had slight lower abdominal tenderness. Rectal examination was normal, but after this she had her bowels open followed by tenesmus, and over the next hour there was a rapid increase in pallor and shock with the development of generalized abdominal guarding and rebound tenderness. A vaginal examination was not performed at this stage but a diagnosis of ruptured ectopic gestation was made, intravenous therapy was started, and preparations were made for immediate operation.

At laparotomy 3 pints (1.7 l.) of blood and clots were found in the peritoneal cavity, but the tubes and ovaries (and spleen) were normal. Further search revealed three raw areas in the pouch of Douglas each about 1.5 cm. in diameter; one was on the floor of the pouch with some trophoblast attached and was bleeding, the second on the posterior aspect of the uterus, and the third on the anterior surface of the rectum (Figs. 1 and 2).

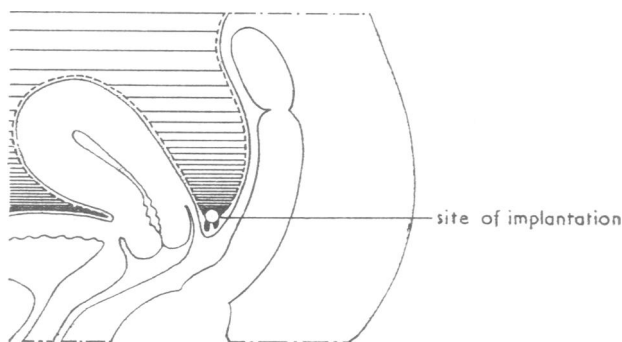


FIG. 1.—Diagram of sagittal section of pelvis to show site of implantation.

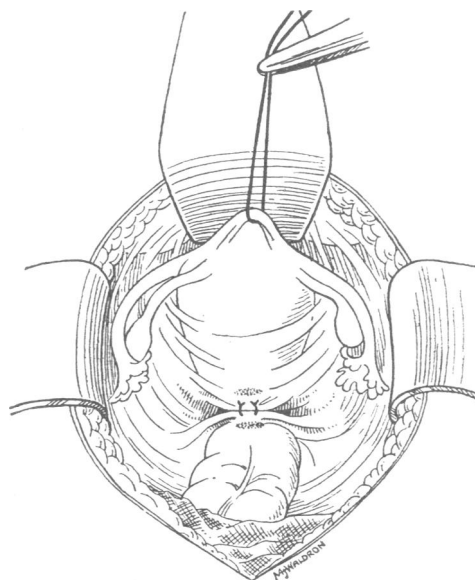


FIG. 2.—Drawing from operation sketch. The bleeding area has been oversewn and the adjacent raw areas are represented by stippling.

When traction was released from the uterus and rectum the three areas lay adjacent to each other, forming a small hemispherical cavity. The bleeding area was oversewn with catgut. Trophoblast, but not the embryo, was found among the blood clot. Vaginal examination under anaesthesia postoperatively showed no evidence of injury or instrumentation. Possibly the rectal examination had produced the final rupture.

She made an uneventful postoperative recovery, and when seen in the outpatient department four months later was well and menstruation had returned to normal.

Histology.—By comparison with placentae belonging to embryos of known size the histology corresponds most closely to those of 10 to 15-mm. (37 to 42-day) embryos as regards the characteristics of the cytotrophoblast and syncytiotrophoblast and the disposition of the stromal cells.

DISCUSSION

Studdiford's (1942) three criteria for a primary peritoneal pregnancy are as follows: (1) both tubes and ovaries must be normal, with no evidence of recent and remote injury, (2) there must be no evidence of uteroperitoneal fistula, and (3) the pregnancy must be related exclusively to the peritoneal surface and young enough to eliminate the possibility of secondary implantation following a primary nidation in the tube.

Millar (1961) pointed out that the earlier the pregnancy can be detected the more convincing will be the evidence of primary peritoneal implantation, and recorded the youngest reported case, that of a 23–24-day pregnancy. The present case fulfils the three criteria, and it is significant that the implantation site was well away from the tubes and ovaries.

Cavanagh (1958) suggested that the majority of peritoneal pregnancies are secondary, the ovum escaping from the tube and becoming attached to the omentum. It is then transferred to part of the peritoneal surface, where it is finally implanted. If this is so the omentum should be found adherent near the implantation site, which it was not in this case.

Iffy (1961), after analysing the timing of a series of accurately dated cases of ectopic pregnancy, concluded that conception occurred just before the last period. He stressed that they were derived from the ovulation before, not after, the last normal period and suggested that the menstrual bleeding itself was

responsible for displacement of the ovum by producing blood in the tubes.

In the present case, however, the dating is more suggestive of conception from a normal ovulation about two weeks before the last period. Though it is certain that the peritoneal implantation was not secondary to tubal rupture, it is possible that a loose initial attachment was formed in the tube and the embryo later extruded from the ostium by retrograde menstrual flow. It is equally possible that the ovum was fertilized outside the tube and descended into the pouch of Douglas. Whichever occurred, the first effective implantation was on the peritoneum and was sufficiently well established to produce 3 pints (1.7 l.) of blood on rupture.

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Iliacus Haematoma Syndrome as a Complication of Anticoagulant Therapy

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Intramuscular haematomas in patients receiving anticoagulant drugs rarely cause peripheral nerve damage. Two cases of femoral nerve palsy admitted to hospital after the onset of paralysis were described by Lange (1966). Below is a report of a similar case which occurred while the patient was in hospital and the entire course of the syndrome was observed.

CASE HISTORY

A man aged 68 was admitted to hospital on 22 November 1962 for treatment of a deep vein thrombosis of the right leg. During the previous month he had been treated at home with tetracycline for an exacerbation of his bronchitis. The right leg was oedematous but the left was normal, with full, active movements at the hip, knee, and ankle. Blood pressure was 225/125 and haemoglobin 89%. The white cell count, erythrocyte sedimentation rate, plasma proteins, electrolytes, and blood urea were normal. Anticoagulant treatment with phenindione was begun that day, together with chlorothiazide.

On the fifth day his right leg had greatly improved and mobilization was begun. He moved himself into a sitting position on the edge of his bed and felt a sudden severe pain in the left inguinal region. As this worsened he found that the anterior and medial sides of the left thigh and the medial side of the lower leg were

numb. When examined shortly afterwards he lay with his left hip in 90 degrees of flexion and slight abduction and external rotation. Tenderness, guarding, and fullness were present in the left iliac fossa. There was sensory loss in the area of distribution of the

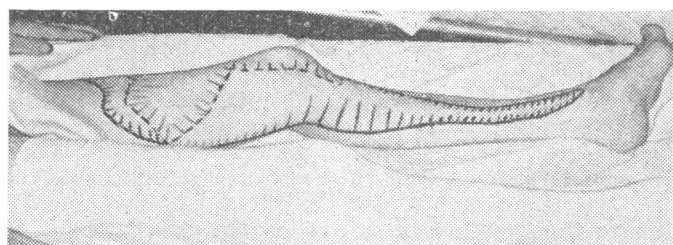


FIG. 1

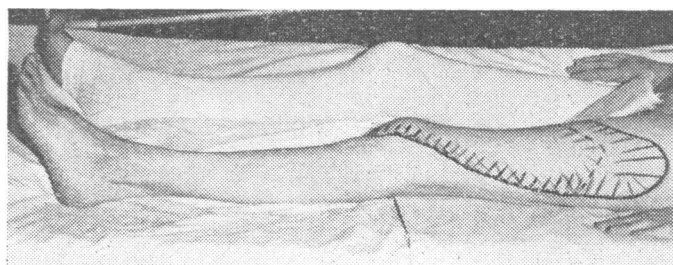


FIG. 2

FIGS. 1 and 2.—Area of initial sensory loss is shown by a solid line and area a week later by an interrupted one.