# LITHOKELIPHOS FORMATION IN ADVANCED EXTRA-UTERINE PREGNANCY

by

D. P. GHATAK, M.R.C.O.G. (London)

The incidence of lithopedion in various forms of ectopic pregnancy has been reported to be 1-2%. Kuchenmeister gave the following classification of calfication changes occurring in the membranes and foetus:

(1) Lithokelyphos—Membranes alone are calcified. The foetus is not calcified.

(2) Lthokelyphopedion — The membranes and foetus are calcified.

(3) True lithopedion—Foetal body alone involved in calcification. In 1949 Mathieu reviewed 229 case reports of lithopedion formation and added 31 of his own. Hemley and Schwinger in 1952 quoted the incidence of lithopedion to be 1.8 to 2%. For lithopedion formation certain criteria must be met.

(a) Pregnancy must be extra-uterine and the foetus must survive longer than 3 months;

(b) Diagnosis of ectopic pregnancy must have been missed and foetus must be retained in the abdomen for some years;

(c) The circulation must be minimal for deposition of calcium.

Recently I have encountered a case of lithokeliphos formation in an advanced extra-uterine preghancy. The foetus was retained in the abdomen for 10 years without any trouble to the mother. This case is thought to be worth presenting in view of its rarity. Ectopic pregnancy acute or subacute is one of the commonest Gynaecological problem in Sokoto (Nigeria).

*General Hosptial Sokoto, Nigeria.*
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## CASE REPORT

Mrs. L., a moslem married lady aged 40 years was admitted into the General Hospital, Sokoto on 25th August, 1976 for a lump in the abdomen for last 11 years.

**Present History:** Ten years back she was about 8 months pregnant. It was trouble-free pregnancy. But at the end of 8 months, she had vaginal bleeding for 7 days Foetal movement ceased a few days prior to the vaginal bleeding. Symptoms of pregnancy receeded such as, reduction in size of breast and abdomen. Thereafter she was having menstrual period every month. She was unable to deliver the baby. Apart from a swelling in the abdomen she had no complaints. She was treated with native medicine without any result. One decade had passed till she came across a student nurse who brought her to Gynaecology Department of the General Hospital, Sokoto.

**Obstetric History:** Para 1 + 0 LCB 20 years back.

**History of Medical and Surgical illness:** Nothing Significant.

**Mentrual History:** 5/28-30 LMP—20 days back.

**General Condition:** Anaemia—Nil, BP. 120/80. Nourishment—Good. Heart and Lung—N.A.D. Breast—Normal. No milk scretion could be seen.

**Abdominal Examination:** A painless hard mobile mass with definite margins was felt. It simulated 30 weeks pregnant uterus but its lower border could be felt per abdomen.

**Vaginal Examination:** Cervix—closed and of normal size. Uterus was of normal size and felt separate from the abdominal mass.

**X-ray:** A macerated foetus lying tranversely across the abdomen. At the lower pole of the foetus there was a crescentic area of dense cal-

cification and thin calcification was seen around the foetus (Fig. 1).

**Hysterosalphingogram:** Uterus was separate from the foetus.

**Diagnosis:** Advanced extrauterine pregnancy with lithopedion formation.

Laparotomy performed on 7th September 1976 showed a hard granular whitish mass with mild adhesions to intestines, mesentry and omentum. Its upper pole burrowed underneath the tranverse colon and was attached to the root of the mesentry. There were very little adhesions in the lower pole of the mass. The mass was delivered easily by deviding the omental adhesions. The mass was connected to the uterus by the left fallopian tube. The outer end of the tube was incorporated into the mass. The left ovary could not be traced. Possibly it was incorporated into the mass. The mass along with left tube was easily excised by dividing the infundibulo-pelvic ligament and mesosalphinx. No other part of the product of conception could be found in the abdomen. The right tube was found to be kinked, fibrosed and closed (Figs. 2 & 3). Right ovary was normal and uterus was normal in size. The abdomen was closed in layers.

Postoperative period was uneventful and the patient left the hospital on 16th September, 1976.

**Examination of the Mass:** It was a hard eliptical mass with granular surface and one of its pole was stony hard. Its size was that of 30 weeks pregnant uterus. The calcified sac was separated with difficulty from underlying foetus which was dried up and changed into a waxy substance (adepocere). There was no liquor amnii. Foetus was fixed to the sac. Calcified placenta was identified at the hardest pole of the mass. The unbilical cord was attached to the soft part of the placenta facing the foetus. The foetus appeared to be 30-32 weeks size.

## *Discussion*

There are two interesting features in this case. Firstly, the pregnancy was not accompanied by abdominal pain which is the most important and constant feature of extrauterine pregnancy. Secondly, placental attachment remained confind to only the tube and possibly to ovary without involvement of other sorrounding structures. For this reason the operative procedure was very easy. From the clinical symptoms and findings, it is suggested that conception took place at the extreme outer end of the tube possibly at infundibulum or fimbria. As the conception grew, it came out of the tube into the peritoneal cavity while chorion frondosum remained attached to the tube and possibly to the ovary. Later on when placenta was formed, it was attached to the tube and possibly ovary only. So from tubal pregnancy, it became secondary abdominal pregnancy. Usually the chorionic villi get anchored to other structures beside fallopian tube. But this case is an exception and it is difficult to explain. Possibly placenta was receiving enough blood supply from ovarian artery and the tubal branch of uterine artery, so that there was no necessity of further infiltration. As the foetus was growing, gestation sac became thicker and thicker due to deposition of fibrin.

The complete absence of trouble during pregnancy is explained by the fact that there was no haemorrhage or rupture of the tube. Reaction of the fallopian tube to pregnancy is variable and unpredictable. In most of the cases, ovum dies due to dislodgement of villi from rupture of the tube or haemorrhage in the tube. Sometimes the tube may behave like a uterus in accommodating the foetus and may stand well to the invasive power of the chorionic villi as reported in a case by the author in Nigerian Medical Journal, 1976. So it is not unusual that tube has played the role of uterus in providing attachment to the placenta and supplying all the nourishment to the foetus for its growth in this particular case.

## *Summary*

A case of secondary abdominal pregnancy has been described. The pregnancy

was retained for a period of 10 years before it was removed from the abdomen. The foetus underwent adepocere and the membranes and the placenta were calcified (lithokelyphos). The pregnancy took place at the outer end of the fallopian tube. The placenta remained confined to the tube and the ovary only. The foetal sac was mildly adherent to omentum, mesentry and intestines and hence the operation was very easy.

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*See Figs. on Art Paper VIII*