CO-EXISTING INTRA- AND EXTRA-UTERINE PREGNANCY

(Report of a case)

by

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The simultaneous presence of intra and extra-uterine pregnancies in the same patient is a rare condition. It is defined as a combined pregnancy (heterotopic), in which pregnancies must co-exist in a live state at some time, resulting from one or two separate fertilisations within a relatively short period of time.

Duverney (1708) (cited by Devoe & Pratt) was credited with first description of a case of combined pregnancy, diagnosed at postmortem examination (cited by Nandi, 1953). Since then a few excellent reviews on this subject have appeared in the literature. Mitra (1940), recorded a total of 306 (including two of his cases) and Winer *et al* (1957), reported a total of 466 documented cases after reviewing the world literature. By now the figure may be about 500 cases. According to the estimate of Devoe and Pratt (1948), combined pregnancy might be expected to occur in 1 out of 30,000 pregnancies. If this estimate is correct we hope to find more cases of heterotopic pregnancy from the hospital records. This unusual phenomenon raises problems in diagnosis and management and is responsible for high foetal wastage.

Mitra (1940) suggested a clinical classification of combined pregnancy, which is very helpful.

(1) where history suggests ectopic pregnancy,

(2) intra-uterine pregnancy dominates the clinical picture,

(3) where both pregnancies go to term.

(4) where both intra and extra-uterine pregnancies show acute symptoms at the same time.

Case Report

Mrs. L.D., aged 35 years, reported on 22nd January, 1958, complaining of amenorrhoea of 3 months and diffuse lower abdominal pain for the last 10 days.

She had 7 uncomplicated pregnancies with term deliveries of normal infants between the years 1942 to 1954. Her socio-economical condition was poor and the general health was below average. She had no history of previous illness or surgical operation.

Her menstrual cycles were regular and the last normal menstrual period was on 6-10-57. It was revealed from her history that along with the cessation of menstruation she felt the usual symptoms of early pregnancy. On 12-1-58 at about 10 A.M. while performing routine household work, she was seized with a sudden severe attack of stabbing pain in the right side of the lower abdomen, so much so, that she almost fainted. Within a short time the acuteness of the pain diminished and was replaced

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by a constant, diffuse, vague pain in the lower abdomen. She thought the symptoms were due to general weakness and did not think of taking immediate medical help.

On admission, she was obviously in discomfort and the pain was aggravated by movement. She was pale, temperature was 100°F, pulse 96/min., resp. 24/min. and blood pressure 110/70 mm. Hg. Blood examination—Haemoglobin 9.5 gram., R.B.C.—2.8 mil./cu. mm., W.B.C.—13,000/ cu. mm.,

Abdominal examination. A globular mid-line swelling rising about 7.5 cm. above the symphysis pubis was found. It had the usual feel of a pregnant uterus but the right border appeared slightly irregular and tender, specially on movement from side to side. Some amount of muscle guarding was present.

Vaginal examination. The uterus was about 13-14 weeks' size with an irregular mass of about 5 cm. diameter incorporated with the right side of uterus. The mass was slightly tender and extended towards the posterior pouch. The left side of the pelvis was free from any swelling. The cervix was soft. The external os was patulous, irregular but closed and there was no vaginal bleeding.

A provisional diagnosis of uterine pregnancy associated with right-sided pelvic inflammation was made. She was closely observed and advised bed rest and antibiotics.

On 1-2-58 at 8 A.M., she complained of a sharp pain in the right illiac fossa and within an hour she became extremely pale with signs of shock. There was marked abdominal tenderness and muscle guarding. On vaginal examination the pouch of Douglas appeared more bulged and tense. It was pre-operatively diagnosed as a case of ruptured tubal gestation and a laparotomy was performed at 9-30 A.M.

About 10 ounces of fresh, fluid and clotted blood were removed from the abdominal cavity. The right tube and the ovary were embedded in the blood clot over which two loops of small intestine were adherent. There was a rent anteriorly in the tube about 2 cm. from the cornu of the uterus. The adherent loops of intestine were freed, the tube and ovary with blood and fibrinous clots were removed 'en masse'.

The left tube, the ovary and the pregnant uterus were normal. The patient had a transfusion of 300 ml. of blood during the operation and 500 ml. of 5% glucose solution after the operation.

She made an uneventful recovery. Histological examination of the affected fallopian tube showed presence of chorionic tissue with infiltration of leucocytes at places.

On 1-3-58 at 7 P.M. she was readmitted as an emergency patient with vaginal bleeding and abdominal pain. She passed a few big blood clots at home. It was diagnosed to be a case of incomplete abortion. Under general anaesthesia the placenta (about 6.5 cm.) and membranes were evacuated from the uterine cavity. Following that she made good progress and left the hospital on the 6th day.

Follow up:

She again conceived in December, 1958, and gave birth to a normal female baby weighing 3.2 kg. on 28-9-59, when the other tube was ligated.

Discussion and comment:

Large majority of combined gestations are twin pregnancies which originate from a single coitus and have separate sites of implantation, one of which is by definition in the uterine cavity. Because it has never been shown that monozygotic twins can be partitioned and then choose two different sites of implantation, it must therefore be assumed that all heterotopic pregnancies are the result of the fertilisation of two ova.

Combined pregnancy often causes real diagnostic problems and hence the proper management is also difficult. Mehta (1965), is of opinion that the clinical manifestations of the extra-uterine gestation dominate over those of intra-uterine pregnancy. The tubal pregnancy usually ruptures during the early months and the diagnosis of combined pregnancy is arriv-

ed at in most cases just prior to (like the above reported case), or during the operation for extra-uterine pregnancy. Very few cases have been on record in which both conceptions had reached full-term without interruption (Nandi, 1953). Winer *et al* (1957), showed from a large series that only in 9.9 per cent cases had the condition been correctly diagnosed before the operation.

In cases in which the extra-uterine pregnancy remains undiagnosed, the morbidity often extends over days or even weeks. This indicates the necessity for immediate hospitalisation and critical evaluation of the suspected cases.

The outcome of the intra-uterine pregnancy is not encouraging. A rather high incidence of miscarriages, stillbirths and even neonatal deaths has been noted by several workers (Zaron and Sy, 1952, Jolly and Norman, 1965). In this case, in spite of apparent recovery, she miscarried at home after one month and unfortunately the foetus could not be examined for congenital malformations.

It is interesting to note that she conceived within a year and gave birth to a normal infant.

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