PRIMARY OVARIAN PREGNANCY AND INTRAUTERINE CONTRACEPTIVE DEVICE

by

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Introduction

A case of primary ovarian pregnancy with CuT in situ is presented. Association of this entity with IUCD is discussed.

Primary ovarian pregnancy is one of the rarest types of extra uterine pregnancy. The incidence of primary ovarian pregnancies is one varying from 1:25,000 to 1:40,000 (Duckman *et al* 1974; Stromme, 1973 and Tietze, 1960). Since 1970 there has been increasing number of reports of ovarian pregnancy associated with the use of intrauterine contraceptive device (IUCD) (Lehfeldt *et al* 1970; Pugh *et al* 1973 and Campbell *et al* 1974; Fernandez and Barbosa 1976). There has been speculation that apparent increase in the incidence of this process may be related to the IUCD itself.

The present case, the first seen by us here, is of primary ovarian pregnancy with CuT 200 in situ.

CASE REPORT

A 32 years old third gravida with CuT 200 in situ for 1½ years was hospitalised on 8-3-1979 with history of amenorrhoea of 35 days, recurrent attacks of severe abdominal pain for 2 hours associated with vomiting, fainting and slight vaginal bleeding. Her previous menstrual cycles were regular (6/26). On examination the only finding of note was rebound tenderness without rigidity in the lower abdomen. It was marked on the rightside.

Vaginal examination revealed an anteverted uterus of normal size, which was painful on cervical movement, and tenderness was found in the pouch of Douglas. The right adnexa was slightly enlarged and tender. Culdocentesis revealed a haemoperitoneum, and on emergency laparotomy 2½ litre of fresh blood containing blood clots was found in peritoneal cavity. Both tubes, left ovary and uterus were healthy. There was a small rupture site on the surface of the right ovary, which seemingly contained a small blood clot. Simple wedge resection of the right ovary, which included the involved area, was performed. The postoperative course was uneventful. Pathological examination showed villi of first trimester in the ovary (Fig).

Discussion

Ovarian pregnancy with IUCD is rare. There were only 18 cases of ovarian pregnancy with IUCD in English literature upto 1976 (Fernandez and Barbosa 1976), after that few individual case reports have been added. What is the relation, if any, between IUCD and primary ovarian pregnancy?

Lehfeldt and associates (1970) hypothesized that tubal and ovarian pregnancy are relatively more frequent in IUCD users than intrauterine pregnancy, be-

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cause tubal pregnancies are less effectively prevented by IUCD, while ovarian pregnancies are not prevented. In other wards, IUCD's themselves do not directly cause ectopic pregnancy but rather they sharply reduce the likelihood of uterine implantation. Therefore, pregnancy that does occur is much more likely to be extrauterine. IUCD possibly acts by liberating lytic enzymes and/or chemical substances i.e. prostaglandin or prostaglandin like substances in the uterine cavity and fallopian tube. This hypothesis is supported by the observations (Lehfdt *et al* 1970, Fernandez and Barbosa 1976) that IUCD usage has not resulted in decreasing the incidence of ovarian pregnancy since no chemical and/or enzymatic factor is released in the ovary. Hallatt (1976) also opinioned, that no evidence exists in literature to implicate IUCD as causative factor for ovarian pregnancy.

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See Fig. on Art Paper II