VAGINAL OPERATIONS FOR ECTOPIC PREGNANCY

by

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In our previous communication on 'ectopic pregnancy', reporting an incidence of 1 for 242 deliveries, we had discussed the various presentations and the diagnostic problems of this condition, and also the merits and demerits of the accessory diagnostic aids employed (Rajan and Nair, 1976). However, in that report no controversial therapeutic modalities were discussed, and all the patients were managed by laparotomy. Considering the prevalence and practice of different types of vaginal surgical procedures such as colpotomy approach to tubal sterilisation (Purandare, 1970; Soonawala, 1974; Bhaskar Rao and Ghouse, 1975; Achari *et al* 1977; and Rajan and Devi, 1980), vaginal hysterectomy for uterine diseases (Menon, 1968; Masani, 1971; Pratt, 1976; Vaidya *et al* 1979; Purandare, 1980; and Rajan, 1982), Vaginal radical surgery for cervical malignancy (Mitra, 1954; and Purandare, 1980) and vaginal removal of small ovarian enlargements (Menon, 1968; and Purandare, 1980) it was felt that ectopic pregnancy could also be treated through the vaginal route. With this logic we started practising the vaginal approach for surgical treatment of ectopic pregnancy. Quite often the operation amounted to nothing more than a vaginal tubectomy, and in some, with pelvic masses, hysterectomy was required to complete the removal of the diseased adnexum through the vagina. Our experience is illustrated in this article.

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Material and Methods

Between February 1981 and June, 1982 we have operated 11 patients for ectopic pregnancy through the vaginal route. Patient particulars, diagnosis, operative treatment and the follow-up are detailed in Table I. In both groups, acute condition with signs of free blood in the peritonial cavity or 'chronic ectopic pregnancy' with evidence of pelvic mass, we resort to vaginal surgery.

In acute conditions, after making a posterior colpotomy incision (which is very easily made because of the bulging fornix), the collected blood is quickly and completely drained out. If suitable the blood collected over the Soonawala speculum for autotransfusion. Reverse trendelenberg position facilitates quick draniage of the collected blood. Then a Sim's speculum is advanced into the peritoneal cavity anteriorly against the

TABLE I

Vaginal Surgery for Ectopic Pregnancy

Age	Parity	Diagnosis	Surgical procedure	Remarks
26	2 FTND	Tubal rupture (right) ampullary region Left tube involved in adhesions	Bilateral partial salpingectomy	Uneventful recovery
28	1 FTND	Tubal mole (right) in the ampullary region. Other tube and both ovaries normal	Rt. Salpingectomy	Uneventful recovery
28	1 FTND	Tubal rupture (left) in the ampullary region (8 weeks fresh foetus). Other tube and both ovaries healthy	Lt. Salpingectomy	Uneventful recovery
23	2 FTND	Tubal rupture (right) Isthmial region. Other tube and ovaries normal	Rt. Salpingectomy Lt. Pomeroy method of sterilisation	Uneventful recovery
32	2 FTND	Peritubal haematocele on the left side. Corpus luteum left ovary. Other tube and ovary normal	Vaginal hysterectomy with left salpingo-oophorectomy	Uneventful recovery
29	3 FTND (PPS done)	Tubo-ovarian mass — left with peritubal haematocele. Haematosalpinx — Right. Right ovary normal	Vaginal hysterectomy with left salpingo-oophorectomy and right salpingectomy	Uneventful recovery
28	nulli-parous	Ovarian pregnancy (left) Bilateral ovarian endometriosis. Left tube adherent. Right tube normal	Colpotomy failed. Left salpingo-ovariotomy. Adhesions released on the right ovary	Uneventful recovery
28	3 FTND	Ovarian pregnancy (right) tubes and other ovary normal	Rt. salpingo-ovariotomy. Left: Pomeroy sterilisation.	Uneventful recovery sterilisation
30	2 FTND	Tubal rupture — left interstitial portion other tube and ovaries normal	Excision of sac with 12 weeks foetus and left tube Pomeroy on Right	Pelvic abscess Cured by colpotomy drainage
29	3 FTND	Pelvic haematocele, with left tube normal and right tube affected	Evacuation of the pelvic collection and vaginal hysterectomy and right salpingo-oophorectomy	Uneventful recovery
26	3 FTND	Peritubal haematocele on the right side with corpus luteum cyst of ovary. Left adnexum normal	Vaginal hysterectomy with Right salpingo-oophorectomy	Uneventful recovery

posterior wall of the uterus. This brings the tubes and ovaries of either side into proper vision, as seen at the time of vaginal tubectomy. After inspecting both tubes and both ovaries the affected tube or ovary is removed. In multiparous women tubal sterilisation is performed by the Pomeroy's technic. The colpotomy wound is closed in a single layer as done following tubal sterilisation. The patient is discharged within 3 to 6 days following the operation.

In chronic ectopic pregnancy with pelvic haematocoele or unilateral pelvic mass, after opening the cul-de-sac, the operability is assessed. If the haematoma could be evacuated and the affected organ brought into vision easily the adnexal removal is done and the tubal sterilisation operation done by the Pomeroy's technic. If the adnexal organs cannot be inspected properly, in multiparous elderly women, vaginal hysterectomy was performed as the initial step. After hysterectomy we get a clear view of the entire pelvis, and removal of the adnexal mass, usually a peritubal haematocele, is facilitated.

If the pregnancy is situated in the interstitial portion of the tube, as was seen in one multiparous subject of 30 years, the uterus is delivered through the colpotomy incision and the cornual portion resected and the uterine wound sutured carefully. Here agin the alternative is hysterectomy.

Results

Results for vaginal surgery for ectopic pregnancy in 11 patients were quite satisfactory except in 2 patients. In one patient, a nulliparous woman the cul-de-sac could not be opened and hence laparotomy was performed. She had bilateral ovarian and peritoneal endometriosis with ovarian pregnancy and about 3 litres of free blood in the peritoneal cavity. The patient made uneventful recovery after laparotomy.

One patient who had colpotomy drainage of intraperitoneal collection and excision of pregnancy sac at the interstitial portion of the tube developed pelvic abscess in the post-operative period. The abscess was drained effectively through posterior polpotomy and she made complete recovery after a prolonged period of pyrexia.

All the other 9 patients had the advantages of effective treatment of ectopic pregnancy by a less shocking vaginal operative procedure, absence of abdominal wound and its complications, shorter period of hospitalisation of 3 to 6 days, minimal post-operative morbidity and discomforts, and early ambulation. In many of them the surgery amounted to just a vaginal tubectomy procedure.

Discussion

Treatment of ectopic pregnancy is by salpingectomy, salpingostomy or by expressing through the tubal ostium, and the selection of tubal surgery will depend upon the need for conservation of fertility. All these surgical procedures could be acomplished by laparotomy (Jeffcoate, 1975; and Bronson, 1977), colpotomy (Jeffcoate, 1975; Stromme, 1973), Culdoscopy (Paldi *et al* 1975), laparoscopy (Corson, 1979; Bruhat *et al* 1980, and DeCherney *et al* 1981) and by combined laparoscopy and minilaparotomy (Taylor and Cumming, 1979).

Presently, due to better diagnostic facilities, such as the use of ultrasound, radioimmunoassay for the B-subunit of HCG and laparoscopy, there is an increasing frequency of early diagnosis of unruptured tubal ectopic pregnancy. This facilitates planned surgical procedure before much damage is done to the patient as well to her fallopian tubes. Quite often the

tubal surgery could be completed through the laparoscope, and thus a laparotomy could be avoided. However, when the patient is first seen after tubal rupture has occurred with haemoperitoneum or with pevlic haematocele, operation through laparoscope is not possible. In such patients vaginal surgical procedures such as colpotomy drainage and salpingectomy or vaginal hysterectomy and removal of tubo-ovarian mass may be an acceptable alternative to laparotomy. The vaginal approach appears to be less shocking, avoids an abdominal incision, promotes early ambulation, minimal post-operative morbidity and shorter hospital stay.

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