

# A COMPARATIVE CLINICO-PATHOLOGICAL STUDY ON PELVIC AND SCAR ENDOMETRIOSIS†

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While pelvic endometriosis is stated to be a disease of those who 'have', scar endometriosis is becoming a disease of the 'have nots'. The incidence of scar endometriosis has much increased following liberalisation of abortion. The clinical diagnosis of pelvic endometriosis is not always correct, but that of the latter is very easy. Histopathological diagnosis of scar endometriosis is straight-forward but that of the former is not always established.

## Material and Methods:

This study comprises of 35 pelvic and 25 scar endometriosis. Thirteen cases of pelvic and 23 cases of scar endometriosis were treated in Eden Hospital, Calcutta, from September, 1978 to August, 1979. Twenty-two cases of the former and 2 of the latter were treated in the private clinic of senior author (Dawn). The results were analysed in two groups viz.

Group A. Pelvic endometriosis — 35 cases

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Group B. Scar endometriosis — 25 cases

## Results:

30.5% of Group A were aged between 20-30 years against 68% of Group B. 42.8% of the former were nulliparous and 31.4% para 2-4. But only 8% of the latter were uniparous, 72% para 2-4 and 20% para 5-8. Difference in educational and economic status were also noticed. Whereas 88.56% of Group A passed higher secondary level only 8% of Group B did so. The family income of the former was above Rs. 500 per month in 100% against 32% of the latter.

Various symptoms (Table I) were noted in Group A but painful nodule on scar was the only significant symptom in Group B. The nodule increased in size with exaggeration of pain during menstruation. Visible nodule with bluish discoloration was found in 3 cases (Fig. I).

1-4 items in Table II proved endometriosis at laparotomy viz., chocolate cyst, adenomyosis and pelvic endometriosis. So clinical diagnosis was incorrect in 14 cases. Items 5-8 were cases mostly from private clinic. Four of them proved true at operation. The rest 17 cases are on hormone therapy and the diagnosis seems correct from favourable therapeutic response.

TABLE I  
Clinical Features of Group A

Symptoms*	Number	Symptoms*	Number
Menorrhagia	8	Pelvic pain	4
Dysmenorrhoea	9	Infertility	10
Rectal tenesmus	5	Lump in abdomen	2
Dyspareunia	4		

\* More than one symptom in few cases.

TABLE II  
Clinical Diagnosis of Group A Cases

Provisional diagnosis	No. of cases	Provisional diagnosis	No. of cases
1. Ovarian cyst	3	5. Ovarian endometriosis	8
2. Bilateral T.O. mass	4	6. Adenomyosis	6
3. D.U.H.	3	7. Pelvic endometriosis	6
3. Fibroid uterus	4	8. P.O.D. endometriosis	5

\*Double pathology in 4 cases.

TABLE III  
Operative Findings of 18 Cases of Group A

Pathology	No. of cases	Pathology	No. of cases
Unilateral chocolate cyst	3	Sigmoid colon endometriosis	2
Bilateral chocolate cyst	5	Recto-vaginal septum endometriosis	1
Adenomyosis	5	Nodule on uterosacral lig	1
P.O.D. endometriosis	1		

TABLE IV  
Previous Operation in 2 Groups

Operation	Pelvic	Scar	Operation	Pelvic	Scar
Abd. hysterotomy with ligation	—	17 (68%)	Myomectomy	4 (11.43%)	—
S.E. ligation	—	3 (12%)	Appendectomy	2 (5.71%)	—
Tubectomy with ovariectomy	—	1 (4%)	Cholecystectomy	1 (2.85%)	—
Puerperal ligation	—	1 (4%)	D.C./D.I.C.	9 (26.7%)	—
Caesarean Section	—	3 (12%)	H.S.G.	1 (2.85%)	—

Majority of the scar endometriosis followed hysterotomy. Four cases of pelvic endometriosis followed appendectomy and 2 myomectomy.

*Development, Site, Size:* Majority (56%) developed symptoms within a year. In 14 cases the nodule was found on longitudinal scar—7 at the lower end,

TABLE V  
Onset of Scar Endometriosis After Previous Operation

Within 6 months	7-12 months	13-24 months	25-48 months	49-60 months	Over 60 months
9 (36%)	5 (20%)	6 (24%)	2 (8%)	2 (8%)	1 (4%)

4 in the middle and 3 at the upper end. On transverse scar, it was at one end in 8, at both ends in 1 and in the middle in 4. The size varied between 1-2 cms. in 10 cases, 2.5-4 cms, 13 and 5 cms in 2. At operation the nodule was found superficial to rectus sheath in 7 cases, involving the sheath—13, involving the muscle—3 and peritoneum in 1.

#### Treatment:

Eighteen cases of pelvic endometriosis surgery—hysterectomy with bilateral salpingo-oophorectomy—9, hysterectomy with unilateral ovariectomy—4 and resection of chocolate cyst—5. The rest 17 cases are on hormone therapy, norethisterone—10-15 mg. daily for 3-6 months. Pseudopregnancy has been achieved in all with suppression of symptoms. Recurrence of symptoms were noted in 5 on drug withdrawal.

Excision of endometriotic nodule was done in 24 cases. One patient is carrying 36 weeks pregnancy. A big endometrioma was removed from caesarean section scar (Fig. 2).

#### Histopathology:

The macroscopic diagnosis (Table III) could be confirmed in 12 cases (66.66%) of Group A—adenomyosis—5, chocolate cyst—6 and endometriosis of recto-vaginal septum—1. In 2 cases of chocolate cyst the report was 'corpus luteal haemorrhage'. So, operative diagnosis could not be confirmed histopathologically in 6 (33.33%). In 12 cases of Group B, section revealed endometrial glands in pro-

liferative phase, in 4 secretory and in 8 picture of endometriosis in dense scar.

#### Discussion:

The data obtained in this study shows that pelvic endometriosis is more common among educated, well-to-do women of low parity and higher age. This was true when compared to scar endometriosis group. Clinical diagnosis of pelvic endometriosis is often missed (Jeffcoate, 1967), as we did in 14 cases. The operative diagnosis could not be confirmed by histopathology in 33.33%. This may happen in one-third (Novak and Woodruff, 1967) to 50% (Jeffcoate, 1967) as in a big chocolate cyst, the endometrial lining is thinned out and ultimately destroyed. Pseudoxanthoma cells—another criterion, may be found in corpus luteum haematoma or ovarian cyst.

Scar endometriosis, was rare even in the recent past. It has suddenly gone up mainly due to more hysterotomy (Dutta *et al*, 1979). In this centre, whereas there were 8 cases in 6 years (1972-77) we got 25 cases during last 1 year. Direct contamination of the incision by mullerian epithelium is chiefly responsible for scar endometriosis.

It is significant to note the changing trend. 68% of our cases and 100% of Dutta *et al* (1979) followed hysterotomy. In contrast, 12.5% of Greenhill's (1942) 390 cases did so and curiously 28.9% followed ventrifixation. Only 12% of our cases followed caesarean section. It is a paradox that it is followed much less frequently, by scar endometriosis (Novak

and Woodruff, 1967) than hysterotomy. The high incidence is mainly iatrogenic and adequate care in covering the surrounding area will reduce it. For this to achieve operating or assisting by senior persons is necessary.

Seventeen young women were treated with norethisterone. Suppression of symptoms were noted but pregnancy has not yet been recorded. Early promise shown by hormones (Kistner *et al*, 1965) has not been substantiated in larger studies (Dewhurst, 1976). Danazol has been found better (Friedlander, 1973) but we have no experience. Many gynaecologists believe that this group too, is best treated by conservative surgery and it was done in 5 cases. Andrews and Larsen (1974) achieved better result by surgery alone than hormonal pseudopregnancy with or without surgery. Radical surgery was done in 13 cases who do not desire further pregnancy or nearing menopause.

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See Figs. on Art Paper II