

VESICOVAGINAL FISTULAE

(An Analysis of 25 Cases)

By

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SUMMARY

Twenty five cases of vesicovaginal fistulae who attended Zenana Hospital, Udaipur from Jan. 1978 to Dec. 1987) were studied. The majority were due to pressure necrosis during obstructed labour. Repair techniques used are summarised. Most were approached per vaginally. Thirteen were successfully cured.

Introduction

Vesicovaginal fistula is one of the most unfortunate accidents of parturition and gynaecological operations as the patient becomes a social outcast, offensive to her and to others. The frequency of this condition reflects the lack of skilled help available to parturients.

The present study indicates the etiological factors and the measures to prevent and manage the problem of vesicovaginal fistula which is still a major concern in the part of Asia, and one which takes up a disproportionate amount of operating time and post-operative time.

Material and Method

A retrospective analysis of 25 cases of vesicovaginal fistulae which were operated within a period of last 10 years at Zenana Hospital, Udaipur, was done.

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Observations

I. Etiology

Table I shows that most of the fistulae were due to obstetric trauma. Gynaecological operations were responsible in 3 cases. This may be due to dense adhesions or due to pelvic haematoma in post-operative period.

II. Associated factors

1. *Age and parity*: Most of the patients were in the age group of 25-30 years. Fifty per cent of the cases were primiparae while rest of the 50% obstetrical cases developed fistula in a subsequent labour.
2. *Place and duration of labours* Out of 22 cases 6 were home delivered and rest were delivered in the hospital but all the hospital delivered cases were also handled by dais and brought late in labour. Duration of labour was more than 24 hours in 20 of the patients.



Fig. 1
Shows Diaphragmatic hernia of the foetus.

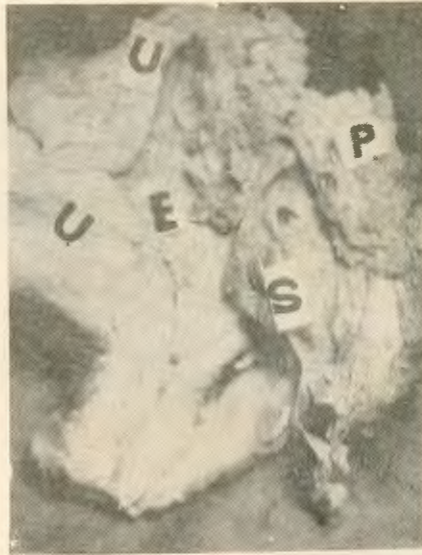


Fig. 1
Unruptured Interstitial pregnancy.

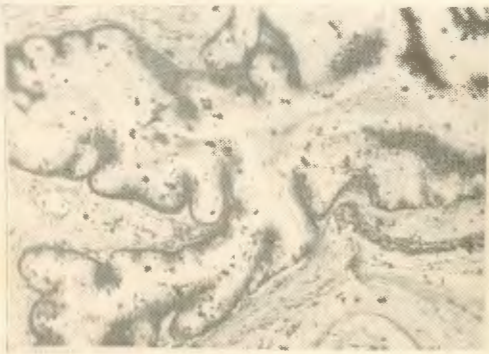


Fig. 1
Histopathology of the left ovary showing
pseudomyxoma cysts oedema.

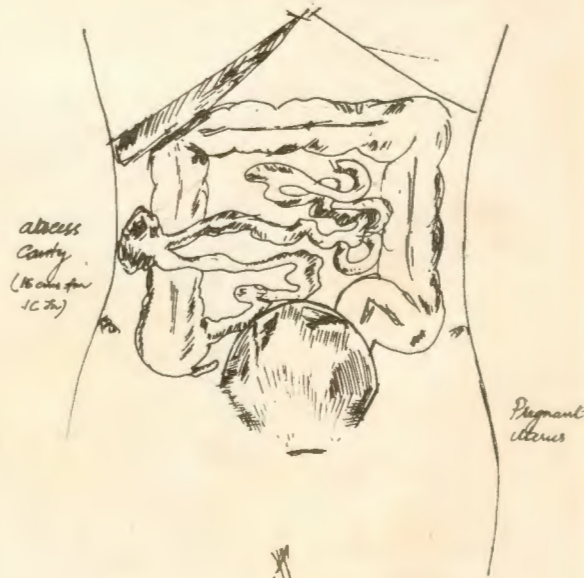


Fig. 1
Shows the ideal perforation.



Fig. 1
Shows a cystic mass attached to abdominal wall
on laparotomy.



Fig. 2
Microscopic picture of hydatid cyst.

*Chronic Fetal Anaemia due to Spontaneous Feto-Maternal Haemorrhage—
Sheriar et al pp. 735-736*

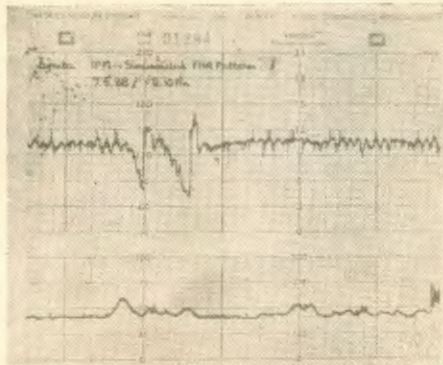


TABLE I
Analysis of Etiological Factors

Etiological factor	No. of cases	Percentage
<i>Obstetric Trauma:</i>		
Prolonged labour: Vaginal delivery	8	
Obstructed labour: Rupture of uterus	3	
Lower segment caesarean section	5	
Craniotomy	2	
Craniotomy with forceps extraction	2	
Forceps delivery	1	
Caesarean subtotal hysterectomy and bladder repair	1 = 22	88
<i>Gynaecological Operations:</i>		
Vaginal hysterectomy	1	
Abdominal hysterectomy	1	
Drainage of hematocolpos and vaginoplasty	1 = 3	12
Total	25	100

III. Complicating factors

1. *Previous attempts of repair:* In this series one of the 25 cases presented, had previous attempt at repair.
2. *Time of repair:* Eighty four per cent cases took treatment within one year. The failure occurred when fistula was as much as seven years duration postpartum while a success was obtained as early as eight weeks postpartum.
3. *Type and size of fistulae:* Twenty of the fistulae were vesical 2 urethral and 3 urethrovesicovaginal. Seven cases had fistulae more than 2 cms in size.
4. *Associated other diseases:* One of the cases had anaemia and urinary infection, one was diabetic and one was syphilitic. These were treated prior to operation. One of the cases had rectovaginal fistula and one had complete perineal tear.

IV. Type of operation

Repair was done by vaginal route in 19 cases, intravesical repair by abdominal route

in 3 cases and urethral reconstruction in 2 cases. In one case repair was not possible due to loss of bladder wall from urethrovesical angle upto ureteric openings and there was extensive fibrosis, hence ureterocolic transplantation was done.

V. Success rate

Out of 25 patients, 13 were repaired used, 1 had urinary diversion, 1 had stress incontinence and 10 had failure.

Average hospital stay was 60 days.

Discussion

Difficult delivery and pressure necrosis due to prolonged obstructed labour was responsible for the vesicovaginal fistulae in the vast majority of cases in the present series. Same was true in 83 out of 102 cases of high fistulae studied by Lawson and Chir (1972). Eighteen of his cases followed gynaecological operations, mostly abdominal hysterectomy and a few due to radiation necrosis and direct injuries. Three of our cases had fistulae after hysterectomy or vaginoplasty.

In the series of Lawson and Chir (1972), 16% cases had previous attempts of repair. These cases with indwelling catheter had urinary infection and 3 of them had vesical calculi. One of our cases also had previous attempt of repair, 1 had anaemia and urinary infection, 1 was diabetic and 1 was syphilitic. These conditions provoke the formation of scar tissue, diminish blood supply, delay the healing and hence decrease the chances of successful closure.

Most of the fistulae were vesical (80%) and 76% were less than 2 cms in size. If the fistula can be reached easily, gynaecologists prefer vaginal approach of repair (Moir 1967) as was done in present series in 76% cases. In the series of Lawson and Chir (1972), two thirds were approached per vaginum and the third per abdomen. In the present series, 52% were cured whereas in the series of Lawson and Chir (1972), the proportion of failures was one sixth in the group repaired per vaginum. Break down of the repair may be due to infection, secondary haemorrhage, interference with catheter drainage but most often due to imperfect surgical technique.

Gray (1970) found that the factors which obstruct a neglected labour are not neces-

sarily recurring and that nontraumatic vaginal delivery can be accomplished following fistula repair. He also stated that concomitant rectovaginal fistula did not affect the results as was in 1 of our cases.

Conclusion

Vesicovaginal fistula is a totally preventable condition with good obstetric attention and care during gynaecological surgery. Training of Dais to conduct normal labour and to identify the abnormal cases to refer them to the hospital in time is essential to prevent the fistula. Prolonged catheterization in post-operative period and long stay at hospital is difficult for patients. The successful repair affords the patient a tremendous relief from symptoms of constant wetness and dramatic improvement in mental, physical and social status.

References

1. Gray, P. H.: *Am. J. Obstet. Gynec.* 107: 898, 1970.
2. Lawson, J. and Chir, B.: *Brit. J. Urology*, 44: 623, 1972.
3. Moir, J. C. (1967), "The Vesico-Vaginal Fistula:" 2nd ed. Ch. 3. London: Bailliere, Tindall and Cassell. (Quoted by Ref. 2).