

EXPERIENCES WITH URINARY FISTULAE IN A RURAL POPULATION

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This paper deals with data about 53 cases of urinary fistulae encountered in Government Raja Mirasdar Hospital, attached to Thanjavur Medical College, during a 3 year period (with report of a few interesting cases encountered). This hospital is a referred centre for the whole district which has an area of nearly 10,000 square kilometers and 8 million population. Agriculture is the main occupation of the people here. Obstetric care in the rural areas is still far from satisfactory and hence it is fairly common here to get fistulae resulting from obstetric trauma.

During the 3 year period under study, there were 53 urinary fistulae out of 3484 gynaecological admissions giving an incidence of 1.5%. Of these, 92% resulted from obstetric trauma and 8% resulted from gynaecological surgery (Table I).

Age: 75% were below 30 years and 8% were over 40 years and the latter constituted the gynaecological fistulae.

Parity: 38% were para I, 30% para II and 32% were para III and above.

TABLE I
Incidence of Urinary Fistulae

Gynecological admissions	3484
Number of urinary fistulae	53 (1.5%)
Obstetric fistulae	49 (92%)
Gynecological fistulae	4 (8%)

Mode of delivery: 83.7% of obstetric fistulae had difficult vaginal delivery out of which 76% were instrumental and 24% were natural deliveries following prolonged labour.

Of the 17% abdominal deliveries, 38% were rupture uterus, 12% failed forceps with caesarean section and 50% had lower segment caesarean section following a prolonged labour outside (Table II).

Forty-one babies out of 49 cases were dead-born giving a very high perinatal mortality of 83.7%.

Duration of Fistulae: Forty-eight patients reported within a year but it is interesting to note that 5 patients were suffering from this problem for 8, 10, 12, 14 and 30 years.

Type of Fistula: This is shown in Table III. The most common type of fistula was vesico-vaginal.

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TABLE II
Mode of Delivery

Mode of delivery	Number of cases	Per cent
I. <i>Vaginal</i>	41	83.7
(a) Instrumental	31	75.6
i. Difficult forceps	27	87
ii. Vacuum	4	13
(b) Natural delivery after prolonged labour	10	24.4
II. <i>Abdominal</i>	8	16.3
i. L.S.C.S.	4	50
ii. Failed forceps and L.S.C.S.	1	12.5
iii. Future uterus	3	38
Total	49	
Perinatal loss	41	83.7

TABLE III
Type of Fistulae

Type of fistula	No. of cases	Per cent
Vesico-vaginal	43	82.0
Vesico-cervical	3	5.4
Vesico-cervico-vaginal	3	5.4
Combined V.V.F. and R.V.F.	1	1.8
Urethro-vaginal	1	1.8
Ureteric	2	3.6
Total	53	100

Regarding the site, about a quarter were high fistulae near the cervix or involving the cervix; low fistulae involving the urethra and bladder neck 18% and mid-vaginal 18%. In a quarter of the cases, almost the whole anterior vaginal wall was destroyed and there were 3 patients with 2 fistulae.

Regarding the fistulae resulting from gynecological operations, 2 occurred fol-

lowing abdominal hysterectomy and 2 after vaginal hysterectomy. There was 2 ureteric fistula and 1 vesico-vaginal fistula in each group.

Associated Complications were as follows:—

R.V.F.—1 case; stress—1; Urethral cicatrix—5 cases (Partial 3 and complete 2); destruction of cervix—3, complete perineal tear—1 case; vesical stone—1 case and vesico-vaginal stone—1 case.

Treatment given: This is shown in Table IV. The commonest mode of repair was the vaginal flap splitting operation. In cases with urethral cicatrix and complete destruction of the bladder walls one has to resort to urinary diversion procedures and ideal conduit was done by the general surgeon for 2 cases. Also, for high cervico-vesical fistulae abdominal route was chosen and abdominal repair with omental transposition was done in 2 cases. There was a case of vesical stone with multiple vesico-vaginal fistulae and

TABLE IV
Treatment Given

	Cases
Flap-splitting operation	43
Urethral reconstruction	1
Transperitoneal, transvesical repair with omental transposition	2
Urinary diversion by ileal conduit	2
Suprapubic transvesical removal of stone and vaginal repair	1
Vaginal removal of the vaginal stone and vaginal repair	1
Colostomy, V.V.F. repair and later R.V.F. repair	1
Abdominal repair of ureteric fistulae	2
Total	53

in this case the stone was removed by the extraperitoneal transvesical approach and fistula was repaired from below at the same time. Another rare case of vaginal stone was removed from below and the fistula was repaired vaginally later.

Results

The success rate in this series was 54% for vaginal repair. Abdominal repair had a 100% success. Urethral reconstruction was done twice in 1 case but it was a failure. One patient had 3 attempts, and 3 had 2 attempts, by the vaginal route and these ended successfully.

Causes of failure: The commonest causes of failure encountered in these cases were severe scarring, too big fistulae, with too much of tissue destruction, difficult approach, edges of fistula being adherent to the bone, urethral avulsion

and bladder neck destruction, multiple fistulae, post-operative infection and sloughing and not, but not the least, carelessness and inefficient care in the post-operative period.

Comments

A high percentage of bladder fistulae resulting from prolonged labour and pressure necrosis belong to a difficult group for treatment, having a poor prognosis. We still do get such difficult cases in our country. In these cases, it is very important for us to plan the appropriate surgery in collaboration with an experienced general surgeon, plastic surgeon or urologist as the need be, and the treatment should be individualized in each case. Instead of resorting to repeated difficult vaginal attempts, it will be fruitful to resort to abdominal extravesical or transvesical route in selected cases or to urinary diversion procedures. This with proper post-operative bladder care and nursing, will go a long way to improve the success rate in these unfortunate women. The cases of ideal conduct were reluctant initially but later they got used to it and the husbands who had abandoned them earlier accepted them after the surgery which is quite a boon to these young girls.

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