Treatment of Congenital Rectal Fistulae Associated with Imperforate Anus in Females

A.K. Wakhlu, M.S. Lecturer, & *R. K. Tandon, M.B. B S. House Officer*
Department of Surgery, K.G.S. Medical College, Lucknow

The present study is based on 10 cases of congenital low rectal fistulae associated with imperforate Anus in female babies admitted to the Gandhi Memorial& Associated Hospitals, Lucknow during the period July, 1970 to May, 1971.

Age Distribution

The youngest patient was I day old and the oldest $1\frac{1}{2}$ years old. Six other cases were 3–8 months of age and two more were less than a month old.

Symptoms

The parents of these babies complained of absence of an anal opening at its normal site and the passage of faecal matter from the vagina. Retardation of growth was an additional symptom in four. In one case there was also a history of repeated attacks of abdominal distension due to constipation and during these episodes the baby would refuse all feeds.

Seven babies were admitted for the first time. Three had been admitted to a hospital at birth. In two of them repeated dilatation was advised and carried out at irregular intervals due to the inability of the parents to report. One had perineal proctoplasty that was tried outside this hospital but the Anus retracted and stenosed, leading to the recurrence of the fistula.

Distribution of Fistulae

It is given in Table I. On examination all of them showed evidence of the presence of sphincter ani externus.

Table I
Distribution of Fistulas

Type of fistula	No. of cases
Rectovaginal	6
Recto-vestibular	2
Recto-perineal	2

Treatment

A standard perineal proctoplasty as described by Gross (1953) was done in all cases. General Anaesthesia was used only in two cases. The rest were done with local infiltration of 0.25% Xylocaine with 1:300.000 adrenaline. As a premedication they were given Tricloryl syrup 2 hours before operation and paraldehyde by intramuscular route half an hour before operation in suitable doses.

The children are draped in the lithotomy position and the site of external sphincter marked. After anaesthetizing, an anteriposterior incision is made in the midline of the perineal floor, starting from 1 cm. distal to

the vulva and extending to the tip of coccyx. The incision is deepened to divide the externl sphincter into two halves. By dissecting close to the hollow of the sacrum, the rectal pouch is identified. This is helped by passing a Hegar dilator through the fistula and pointing its tip downwards. The rectal pouch is freed posteriorly and laterally and as the dissection proceeds anteriorly the fistula is defined. The superior aspect of the fistula is defined by blunt dissection with a fine curved hemostat the tip of which is passed from one side to another between the anterior wall of the rectum and the posterior wall of the vagina. The fistula is then divided, its anterior or vaginal end closed by 3-0 chromic catgut sutures and the rectal end displaced downwards and backwards to the site already marked. Further mobilization of the anterior rectal wall from the posterior vaginal wall is carried out so that the fistulous end projects out well away from the level of the skin without any tension. The edges of the external sphincter and the perineal skin are sutured in front of and behind the rectum. The rectal wall is sutured all round to the subcutaneous tissues by interrupted 5-0 silk sutures. The fistulous stump is excised and the rectal mucous membrane approximated to the surrounding skin by interrputed 4-0 chromic catgut sutures. The anal opening is kept about $1\frac{1}{2}$ times the size of the normal.

A dry gauze dressing is preferred because in our experience vaseline leads to too much of soddening. A perineal bandage is applied. The first dressing is removed next day and then the wound is kept exposed. After each bowel movement the perineum is washed with a dilute antiseptic lotion, dried by gentle pressure with a cotton pad and dusted with any powder. Stitches are removed by 7th postoperative day.

Results

The following criteria were used in assessing the results ;

I. Anatomical : An anatomically good result was considered to be one where :

(a) there was a bridge of normal skin between the vulva and the new anal opening.

(b) the anus did not retract

(c) the calibre of the anal opening was nearly normal two weeks after operation and postoperative dilatation was not required.

(d) the fistula did not recur

II. Functional : Good functional result was based on the assessment of contraction of the internal sphincter felt by a digital examination of the rectum and that of external sphincter seen when the perineal skin was stimulated.

All cases showed uniformly good functional results. Two of the cases have been trained in bowel habits by now and they did not show any incontinence or soiling.

Eight of the cases showed a good anatomical result. In only two cases the result was labelled as fair. In one case the skin incision was given right upto the posterior surface of the fistula and the anterior wall of the rectum was probably inadequately mobilized. Postoperatively due to constant wetting by the patient, the skin sutures in front of the anal opening gave way and the anterior wall

of the rectum retracted. Healing occured by granulation tissue and dilatation had to be carried out intermittently for the next six months. The ultimate result had all the requisites of a good anatomical result including the presence of a skin bridge. In the second case the anterior wall of rectum retracted up and healing occured by granulation and subsequent epithelization. Dilatation had to be carried out for one month post-operatively.

Discussion

The essential problems in the management of congenital anorectal fistulas in females are psychological and functional. Both require attention on the part of the surgeon. The fact that in many cases an adequate stoma with sphincteric control does exist, would not diminish the feeling in the mind of the parents that there is an abnormality present and this feeling is liable to be transmitted subsequently to the patient herself.

Apart from psychological aspects, the presence of functional abnormalities is amply proved by the presence of retarded growth in 4 out of 7 cases in the present series (excluding 3 cases whose age numbered in days).

The lines of management which have been advocated for the treatment of low rectal fistulas in the female are :

1. Repeated dilatation
2. Perineal "cutback" operation
3. Perineal proctoplasty.

1. Dilatation : Whereas dilatation has the advantage to the patient of tiding over the time when she is not fit for surgery because of underweight and prematurity, its disadvantages are that it is required at frequent intervals and a majority of parents find it difficult to report to the hospital regularly. Most parents either do not understand or are afraid of carrying out digital dilatation at home. Successful dilatation dilates the fistula but makes its subsequent operative closure difficult.

2. Perineal Cutback Operation : It gives an adequate opening with sphincteric control but the psychological problem of having an anal opening at an abnormal site remains and in these cases a subsequent perineal proctoplasty has to be carried out.

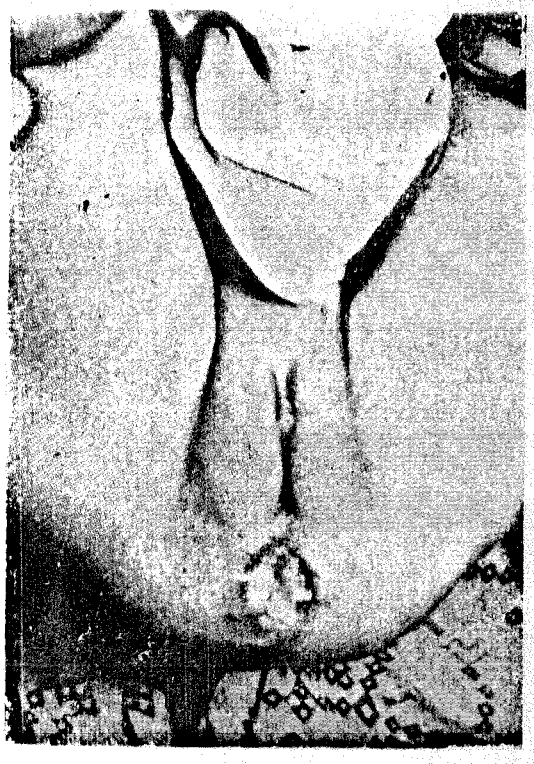

Fig. 1

3. *Perineal Proctoplasty :* It is the operation of choice in these cases and has been advocated by Gross (1953) Swenson and Donnellan (1967). If properly performed, this operation produces a normally functional anus at the natural anatomical site and it does not require any follow up care.

Local anaesthesia was used in eight cases of the present series. Its use followed the refusal of parents of an 8 months old baby to give consent for general anaesthesia. When it was successfully employed in this case, all other except a $1\frac{1}{2}$ years old child was thus operated.

Contrary to the observation of Stephens (1963) the external sphincter was found to be well defined and present at the normal anatomical site in all cases of the present series and its contractions could be elicited both pre and postoperatively.

Pathak and Saifuliah (1969) have advocated the performance of perineal proctoplasty at or beyond 1 year of age. However, Gross (1953) and Swenson and Donnellan (1967) prefer to repair these anomalies in the first few days of life.

In the present series no relation was found between the age of the patient and the ease or difficulty of the operation or its results. Neonates were found to tolerate the surgery involved, as well, as older babies.

The following case reports from our hospital records also highlight the functional

Fig. 2

Fig. 3

problems in these cases.

Case No. I

Baby Kanchan, a case of imperforate anus with low rectovaginal fistula was admitted at birth in the year 1962. Perineal proctoplasty was tried without success and transverse colostomy was performed and baby discharged. In March 1967 at 5 years of age she was admitted again with complaints of passing faeces per vaginum and through the colostomy opening. X-ray examination showed a large foecolith in the rectum which was pressing on the left ureter and producing hydronephrosis on that side (Fig. 2 & 3).

She was advised operation but her parents refused. In November 1967 consent was ultimately obtained and laparotomy done to remove the faecolith. In February 1968 at 6 years of age perineal proctoplasty and closure of colostomy was unkertaken and the patient was cured.

Case No. II

Baby Kamlesh was admitted first time at the age of 6 months with an imperforate anus and low rectovaginal fistula with sub-acute intestinal obstruction. Dilatation was carried out regularly for the next 3 months. Sub-acute obstruction was partially relieved.

She was admitted again at 3 years of age and because of being found a poor surgical risk dilatation was carried out again. Ultimately at 11 years of age perineal proctoplasty was undertaken and she was cured.

Summary

The results of perineal proctoplasty in 10 cases of congenital low rectal fistulas associated with imperforate anus in female babies have been presented. The technique of perineal proctoplasty has been outlined with emphasis on the steps which ensure a good result.

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