

## CONSERVATIVE APPROACH FOR A CURE OF COMPLETE RECTAL PROLAPSE WITH UTERINE DESCENT

by

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A complete rectal prolapse with uterine descent is a rare coincidence in gynaecological practice, though women are six times more prone to simple rectal prolapse during their child bearing age.

Various operations are designed, some are ultra-radical and radical and others are more conservative, often with such modifications to suit the operator's choice and the patient's desire to maintain her reproductive function.

A case of complete rectal prolapse associated with utero-vaginal descent, treated by conservative method is described below:

### Case Note

M. J. aged 35 years, 5th gravida, had her last delivery eleven months ago. She was discharged from the hospital five days after confinement when she got a severe attack of bacillary dysentery. Three days after the onset of dysentery, which lasted about seven days, she noticed that her bowel was coming down on straining. In spite of cure of her dysentery, her bowel prolapse continued to increase till it attained the present size six months ago (Fig. I). She also noticed that for the last three months her uterus was peeping out through the introitus (Fig. II). She had a loop inserted for last 8 months or so (Fig. III).

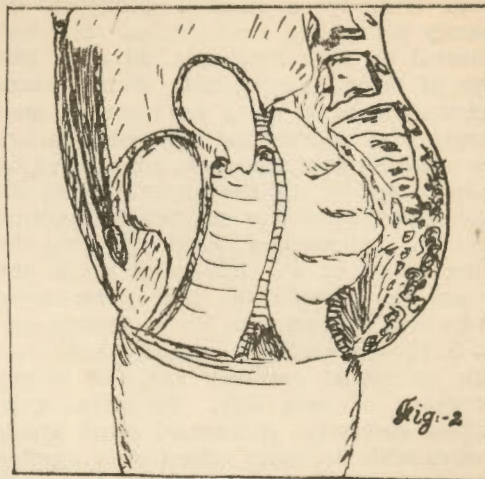
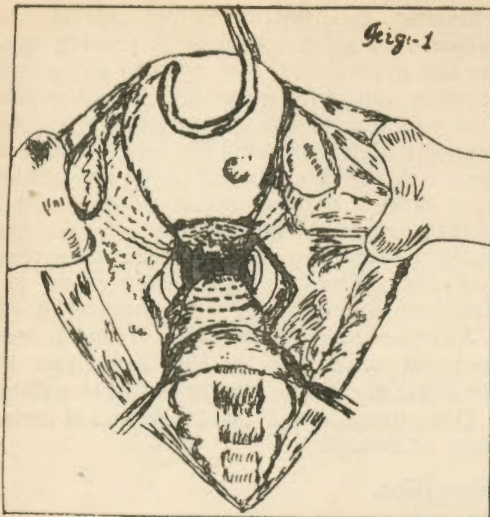
Clinical examination revealed that her general and physical health was good except that her lower abdominal muscles were weak, particularly the recti. Genital and rectal examination revealed that she had 2nd degree uterine prolapse with complete rectal prolapse. Having fully investigated her, she was put up for operation on 8-11-67.

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**Operative technique:** Abdomen was opened through infra-umbilical midline incision. Intestines were packed. An oblong shaped greenish coloured stone about one inch in length was removed from the pouch of Douglas. The near extinction utero-sacral ligaments of both sides were cut under ligature from the uterine end. The peritoneum of the pouch of Douglas was incised transversely and reflected towards the sacral promontory. Rectovaginal space was then separated by blunt dissection as far down as possible. The anterior rectal wall was pulled up and made taut. Under the guidance of a Hawkins Amblers dilator, size 14/17, introduced into the rectum by an assistant, purse string sutures were applied with No. 1 chromic catgut starting from the lowest limit of the dissection and gradually working up till the last stitch was inserted at the level of the internal os. These purse string sutures included anterior rectal wall, para-rectal and para-vaginal tissues and vaginal wall respectively (Figs. 4 and 5). They were applied at an interval of about one centimeter each. By this method of repair one does not find much of a redundant portion of gut which needs tackling later.

The next step of operation was designed to cure the uterine prolapse. In this particular case, as the patient had a number of children, tubectomies were performed first and then the round ligament of each side was brought out posteriorly between the leaves of the broad ligaments through the opening in the pouch of Douglas (already made during the first stage of operation (See Fig. 4). They were then crossed and anchored at the level of the internal os with No. 2 silk sutures. The utero-sacral ligaments of both sides were also plicated and anchored again at the level of the internal os just below the level of the crossed round ligaments. The raw area was then peritonised with the posterior flap of pouch of Douglas. Lastly, the uterovesical peritoneum was incised, the bladder mobilised



Figs. 4 &amp; 5.

Sketches showing steps of rectovaginal fusion operation—anteroposterior and lateral view.

from the cervico-vaginal junction and this peritoneum was then raised and stitched behind the fundus of the uterus more or less like that of Lauros technique for stress incontinence.

The repair of intra-umbilical part of abdominal wall was then taken up. After having closed the parietal peritoneum, the posterior layer of the rectus sheath was split transversely into half inch flaps up to the linea semilunaris and then they were stitched alternately superimposing each other. The lower part being devoid of the sheath the internal oblique muscles were brought together and stitched with interrupted chromic No. 2 catgut sutures. Similar flap splitting techniques was adopted with the anterior layer of rectus sheath except that these flaps were of one inch in breadth.

A colpoperineoraphy was then done in which that part of the lower rectal wall not stitched at the time of abdominal operation, was now incorporated during the tightening of the levatores ani. Figs. 6a, 6b.

However, it was noticed, after about 14 days, that the patient had started showing slight prolapse of posterior rectal wall only on straining which gradually increased and attained the present size in about a month's time (Fig. 7). She was discharged after 21 days at her own request, with an advise to

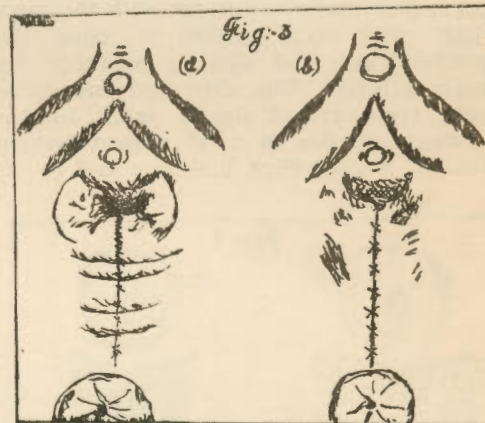


Fig. 6 (a &amp; b).

Sketches showing steps of colpoperineography incorporating rectal wall while stitching levatores ani.

carry on anal sphincter exercises and to report after two months or earlier if the prolapse was increasing. She reported in the first week of January, 68 i.e. three months after the first operation. She said that though the prolapse had not progressed since two months or so, she was getting progressive increase of pain during the act of defaecation. Hence it was decided to carry out another operation to tighten the



ischio-coccygeus for prolapse of posterior rectal wall by a method described by Bonney with slight modification. She was operated on 17th February, 68 after five days of bowel preparation. A transverse incision was made along the posterior anal margin just outside the anal corrugation. The posterior anal space was approached by blunt dissection and the upper limit of the prolapsed rectum was defined by pulling the rectal mucosa downward. Keeping the index finger of the left hand inside the rectum as a guide the first purse-string suture was applied with No. 1 chromic catgut to the apex of the prolapsed anal wall with its fascial covering and the ischio-coccygeus of both side. Following this, further successive downward purse string sutures with the same catgut were applied in a similar fashion half a centimeter apart. Altogether about four or five such stitches were required. The deeper gap of the posterior anal space having been thus closed, four mattress sutures with the same catgut were then applied to close the superficial gap and also to reinforce the deeper sutures. The skin and superficial fascia were closed finally with further mattress sutures in a "T" shaped fashion with No. 4 silk (Figs. 8 a, b, c and d).

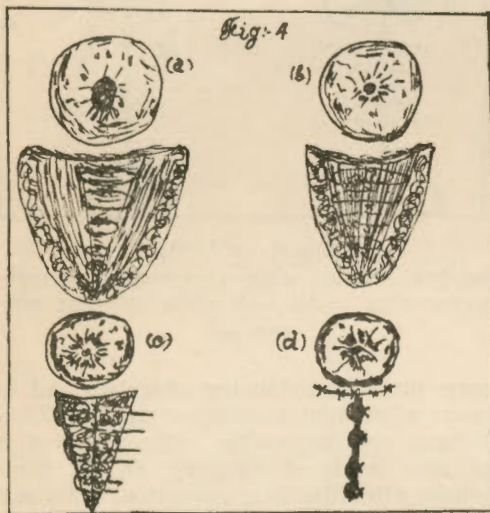


Fig. 8 (a to d).

Steps of operation showing tightening of ischio-coccygeus along with posterior rectal wall in second stage of operation.

During the post-operative period the patient had some difficulty in passing stool for about 20 days. She used to get severe bursting pain during the act of defaecation. This was due to the exaggerated anorectal flexure which prevented the easy passage of stool. Hence she was put on liquid paraffin daily with a regular rectal dilatation and rectal massage for 20 days and she was discharged from the hospital symptom free. Now the patient is well without any recurrence for more than two years (Fig. 9).

Another case of prolapse rectum was operated on recently on 10th April 1970 by the same technique but in a single sitting.

The patient is well upto now and is under close observation.

#### Discussion

The initiation of rectal prolapse starts first with the invagination of the anterior wall through the lumen. When complete, the posterior wall is dragged along from below upward in the same sequence as that of utero-vaginal prolapse. The production of this condition is due to the damage of pelvirectal support. Banerjee (1963 quoting Goff (1931) and Ricci *et al* (1947) states that the so-called recto-vaginal septum is an outer fibro-muscular portion of the vaginal wall and that histologically it is proved that this space is covered by areolar tissue and not by any membrane; and according to Banerjee it is for this reason that the anterior rectal wall is intrinsically weak. According to Meigs (1950) (quoted by Banerjee again) there is a congenital type of enterocele (in certain cases) which is a narrow sac arising just behind the cervix and between the utero-sacral ligaments, and lying on top of the anterior rectal wall behind the posterior vaginal wall, in the rectovaginal septum. The prolapse of the posterior cul-de-sac peritoneum, proceeds straight down into the upper rectum and invaginates the upper anterior rectal wall into the lower rectum and anus. Banerjee concludes that his first two

cases were of a congenital type of enterocele which initiated the prolapse of rectum. It is difficult to agree with his conclusion, as congenital type of enterocele should have started much earlier than hitherto quoted. On perusal of these case reports one finds that the first case aged 52 years, para 5, had her last delivery 18 years ago, that is about 10 years after her last delivery this patient developed rectal prolapse following a severe attack of bacillary dysentery, and second degree utero-vaginal prolapse occurred a year later. The second case aged 40 years, para 8, developed concealed type of rectal prolapse two years after her last delivery (in 1954) with a precipitate labour followed by post-partum haemorrhage and puerperal sepsis which endowed her ultimately with chronic inversion of uterus. From the above it is obvious that the bacillary dysentery with rectal tenesmus is the immediate cause of this prolapse of rectum in the first case which was left with weak pelvic support following so many deliveries in an ill-nourished woman. In the second case the chronic invalidism following chronic inversion and puerperal sepsis, which invariably is associated with chronic proctitis, was the immediate cause of prolapse in a woman having again a weak pelvic support.

It is the author's belief that the production of rectal and utero-vaginal prolapse is the result of non-neutralization of intra-abdominal pressure due to weak recti muscles and a weak pelvic support. If the recti and levatores ani muscle tone are weak then the total neutralization of

the intra-abdominal pressure on the pelvic organs is lacking and hence initiation of prolapse, be it rectal or utero-vaginal (see Fig. 5). Congenital enterocele will of course be an added factor and will initiate prolapse much earlier and even in the nulliparous state.

In the author's case the initiation of the prolapse was due to the lack of recti and levatores ani muscle tone aggravated by bacillary dysentery. Hence repair of weak abdominal muscles in this case has given the author his desired result of neutralization of intra-abdominal pressure. The utero-vaginal prolapse must have started almost simultaneously with rectal prolapse. But, as it did not come out of the vulva the patient had missed this, hence this interval of three months between the two prolapses can be explained.

#### *Summary*

(a) A case of complete rectal and 2nd degree utero-vaginal prolapse is presented. (b) A new conservative operation technique is described. (c) An aetiological cause of this prolapse is discussed and author's own view is presented.

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*See Figs. on Art Paper II and III*