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## A NEW OPERATION FOR PROLAPSE OF THE UTERUS

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When second and third degree prolapse occurs in young women who are desirous of having more children, or when it occurs in a nullipara, it is very difficult to correct the prolapse by one of the well known methods and at the same time promise successful termination of future pregnancy. The Manchester School advocates Fothergill operation or one of the modifications as the method of choice.

Fletcher Shaw, in his well known paper read before the American Association of Obstetricians and Gynaecologists in 1933, said that he had seen twenty seven cases who Fothergill had operation done on them deliver normally. This was out of a series of 587 cases in all age groups. He admits that the follow-up was very poor and so he could not give accurate statistics.

Paper read at a clinical meeting of the Bombay Obstetric & Gynaecological Society. In 1938 Bryan Williams read a paper before the North of England Obstetrical and Gynaecological Society, and in this he has given us a very good idea as to what happens to patients who have a Fothergill operation done on them and who subsequently become pregnant. He followed up 41 patients who had this operation done on them. There was no difficulty in conceiving after amputation of the cervix. However there are many troubles in retaining the conception and also during labour.

"Information about the period elapsing between operation and the first subsequent pregnancy was available in 29 cases.

- (1) In 23 of these, pregnancy followed within 3 years.
- (2) In 19 cases within 2 years.
- (3) In 10 cases within 1 year.

(4) In 6 cases within 7 months.

Average 2.3 years.

"The course of 49 pregnancies, in

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these 37 cases, may now be considered.

"Previous to operation, these patients had two hundred and twenty-three pregnancies including 26 abortions and 12 instrumental deliveries. Of the 49 pregnancies, following Fothergill's operation, 4 terminated in therapeutic abortions or inductions, 20 in abortions, 8 premature labours and only 13 in fulltime pregnancies. Remaining 4 had progressed normally when last seen at varying periods between twenty and thirty-two weeks.

Excluding the cases induced and the cases still progressing when last seen, out of 41 pregnancies known to have occurred where the cervix had been definitely amputated, abortion or premature labour resulted 28 times or in no less than 60% of cases. In the same series previous to operation abortion occurred only in 1.5% of cases."

The conclusions drawn by him are:—

- (1) Amputation of the cervix does not prevent pregnancy.
- (2) If pregnancy occurs there is a high risk of abortion, premature labour or of obstructed labour requiring caesarean section.
- (3) The operation of amputation of cervix with repair of the anterior and posterior vaginal walls should not be carried out in patients of child-bearing age.

Most of the troubles following Manchester operations are due to amputation of cervix. If one does not amputate the cervix in cases where it is elongated then the cervix left

behind looks long and remains lowdown in the vagina. Original Fothergill stitch, to bring forward the lateral cervical ligaments, is generally insufficient to hold the cervix backwards. If an operator boldly picks up sufficient tissue on either side and brings it forcibly forward in front of the cervix, the suture either cuts through the tissues in a few days under tension, or the compression of the cervix is so great as to interfere with its blood supply. Some of the cervices look purple at the end of the operation. To obviate this difficulty Dr. Te Linde and others divide the tissue forming the lateral ligaments, and transfer it anteriorly to the cervix. In my opinion, although this is a distinct improvement over the Fothergill stitch, the tissue picked up is not enough to give the operator a feeling of strength and security. This transfer shortens the ligament on each side only three-fourths of an inch at the most, and is not often enough to take the cervix well back into the vagina. My feeling about the operation is that the only step that takes the cervix up in Manchester operation is due to the broad base of triangular part of the vagina which is removed and which necessitates pushing the cervix back, deep into the vagina before the two flaps can be apposed. Now this step diminishes the capacity of the vault of the vagina and is a poor support at its best. Other points of interest noted by me, while operating on cases of prolapse, are that in many cases there is no appreciable elongation of the cervix and that the elongation, if any. could be pulled up into the pouch of Douglas and only a normal length of cervix left projecting into the vagina by a new technic, which I describe below.

Elongation of cervix by itself does not prevent conception, as every one of us has seen cases of even third degree prolapse become pregnant inspite of elongation of the cervix. If so, then why should we amputate the cervix at all? The cervical glands have a definite physiological tunction and they supply the natural mucoid lubricant to help the onward passage of the foetus.

One day about seven years ago while doing a vaginal hysterectomy it occurred to me that the tissues which one clamps first, after opening the pouch of Douglas and which are made up of the uterosacral and lower part of the lateral cervical ligaments, could, if brought forwards to a sufficient degree across the front of the cervix, form very efficient shelf for the cervix. I then tried this in well over sixty cases of second and third degree prolapse and have been so impressed with the results that I feel bold enough to make my views known to my fellow gynaecologists. Some years ago Doctor Jellet of Rotunda Hospital recommended extra-peritoneal shortening of uterosacral ligaments. This was perhaps not very successful and hence one does not find it described in any of the modern books on operative gynaecology. I will now proceed to describe the details of the different steps of my operation.

## Incision.

Where there is no cystocele, a circular incision is made around the cervix at the desired level (Figs. 1 & 2). When there is cystocele, usual

inverted T shaped incision is made first and the cystocele repaired. Then the ends of the horizontal part of the inverted T shaped incision are continued backwards encircling the cervix. The vaginal walls are dissected upwards all round the cervix to make a bed for the lateral cervical and uterosacral ligaments, which I propose to bring forwards (after division) in front of the cervix.

The pouch of Douglas is opened as usual by holding the cervix forward by means of two stay-sutures or a vulsellum (Fig. 3). Uterosacral ligaments and the

lower part of lateral cervical ligaments are made prominent by inserting the index finger under them (Fig. 4). Each ligament is clamped between two clamps as near the cervix as possible (Fig. 5). The ligament is mobilised along its upper border by cutting outwards and parallel to its lower border. This is a very important step. The degree of mobilisation, particularly its depth, depending upon the degree of elongation which this part of the ligament has undergone. The end of each ligament is transfixed with a medium size cotton thread and the ends of the thread kept long to enable one to cross the two ligaments in front of the cervix (Fig. 5).

The peritoneum of the pouch of Douglas attached to the posterior vaginal wall is dissected as a flap away from the vaginal wall. This is stitched low down on the cervix, making a good deal of the raw surface "R" (Fig. 7) on the posterior part of the elongated cervix intraperitoneal. The peritoneum which was dissected from the point  $P_2$ (Fig. 7) where it was attached to the

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 $P_4 P_2$ , is stitched low down at point with an antiseptic solution. It is  $P_3$  just short of the original line of better to administer antibiotics for incision on the posterior part of the the first three days after the operacervix. In case where there is a hernia tion as a precautionary measure. of the pouch of Douglas the peritoneum should be dissected well up Summary: to point P4 and this point P4 apposed to point P3. Then the cervix is pushed up into the vagina to the required depth and one estimates how much the prepared ligaments should cross in front of the cervix to pull the cervix up to the desired depth. It is better to pass the suture through the prepared ligaments at the desired spot on the cervix and to leave the sutures long and held by clamps (Fig. 6) so that one is able to tighten them after pushing the cervix well in. It is a distinct advantage to suture the posterior vaginal wall between two ligaments to its original place on the cervix before tightening the prepared ligaments in front of the cervix.

The rest of the vaginal flaps are now sutured in place around the cervix. One is likely to find the anterior flaps too broad due to stretching caused by cystocele. In such cases one may have to sacrifice a small portion of the flaps on each side to allow proper apposition. The next step of the operation is posterior colpoperineorrhaphy bringing the levator ani muscles together to the desired degree. At the end of the perineorrhaphy a vaginal speculum is inserted and the vagina lightly packed with a small roll of gauze soaked in glycerine mercurochrome (one per cent). The gauze is removed after

vaginal wall "V", shown as a flap 48 hours and the vagina irrigated

(1) A new operation for prolapse has been described and recommended for cases where the child bearing function is to be preserved.

(2) Cervix is preserved intact even when it is elongated.

(3) Opening of the pouch and cutting out the desired breadth and length of the uterosacral and lateral cervical ligaments give the operator a chance to bring in front of the cervix a really strong tissue.

Advancement of the peri-(4)toneum of the pouch of Douglas gives that additional pull to the cervix and takes it well back. It is well known how the peritoneum has an elastic pull as the effect of anaesthesia passes off. This also helps us to pull and hide the elongated cervix into the abdominal cavity.

I have a complete film of the operation and those that are interested in this operation should write to me in case they wish to see the different steps of the operation.

I am very thankful to Mr. W. Cooper for the excellent line drawings of the operation.

References.

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