

## THE MANCHESTER OPERATION FOR PELVIC ORGAN PROLAPSE - REVISITED

### Introduction

The Manchester operation was invented more than 100 years ago by Archibald Donald at St. Mary's Hospital in Manchester and later modified by his pupil W.E Fothergill. It gained a widespread use all over the world.

The important principles of the procedure, emphasized by these two gynecologists with a profound understanding of the anatomy and mechanics of the female pelvis, seem to have been forgotten over the years, resulting in less good results and the procedure being abandoned in many countries.

The hysterectomy included in many other forms of vaginal repair for pelvic organ prolapse (POP), seems to increase the risk of recurrences. The introduction of synthetic grafts in vaginal surgery to avoid recurrences, has introduced some severe complications. It therefore seems reasonable to re-introduce a procedure with good results and few complications.

Design: This video is created to demonstrate the surgical procedure of the Manchester operation. It presents the essential steps of the operation, that takes about an hour to perform.

Results: The Manchester procedure aims at a repair of the anterior wall, a suspension of the apex and restoring the normal horizontal axis of the vagina. The major steps of the operation and what they intend to achieve are the following:

The vaginal mucosa is dissected off the vesico-vaginal fascia, the cervix and cardinal and uterosacral ligaments. The bladder is separated from the anterior aspect of the cervix in order to be lifted into its normal place in the pelvis. The fascia is doubled by the anterior colporrhaphy. The last stitch is anchored to the isthmus of the uterus. The ligaments are clamped, shortened and fixed to the anterior aspect of the isthmus. This transposition of the ligaments pulls the cervix up and backwards into the hollow of the sacrum and results in an anteversion of the uterus. This is a favorable mechanical situation because increased load from above will only result in the vagina being brought upwards.

Cervix is amputated as high as possible. The vaginal wall is excised. The cervical remnant is covered with vaginal mucosa (with Sturmdorf sutures).

In almost every case the perineal body needs some repair to achieve support for the anterior wall and to restore the normal axis of the vagina. A rectocele and enterocele are repaired if present. The size of the introitus has to be planned carefully to avoid dyspareunia. In sexually active women levator muscle sutures should be avoided, and only the connective tissue in the area and the transverse perineal and bulbocavernosus muscles are to be included in the repair.

This procedure is performed in about 75 % of primary prolapse surgery in our department. Since 2002 all women treated for prolapse have been invited to an examination one year after the procedure, and about 90% have accepted. Simple variables are recorded in a local register. So far 95% was satisfied with the surgery, and only 1.5% needed repeated surgery. Seven % had minor postoperative complications, such as infection, hematoma, voiding difficulty. No major complications occurred.

A study is ongoing contacting all women more than 5 years after surgery to evaluate the long-term results.

### Conclusion

The Manchester procedure has good results and few complications. However, the good clinical results are highly dependent on understanding and following the anatomical principals of the procedure.

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<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>No</b>
<b><i>This study did not require ethics committee approval because</i></b>	<b>The women operated on in the video gave her informed consent</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>