## International Journal of Clinical Obstetrics and Gynaecology

ISSN (P): 2522-6614 ISSN (E): 2522-6622 © Gynaecology Journal www.gynaecologyjournal.com 2021; 5(2): 72-73

Received: 06-02-2021 Accepted: 10-03-2021

#### Avir Sarkar

Senior Resident, Department of Obstetrics and Gynecology, ESIC Medical College and Hospital, Faridabad, Haryana, India

#### JC Sharma

Professor and Head, Department of Obstetrics and Gynecology, ESIC Medical College and Hospital, Faridabad, Haryana, India

### Sonam Jindal

Assistant Professor, Department of Obstetrics and Gynecology, ESIC Medical College and Hospital, Faridabad, Haryana, India

## Isha Wadhawan

Senior Resident, Department of Obstetrics and Gynecology, ESIC Medical College and Hospital, Faridabad, Haryana, India

## Corresponding Author: Avir Sarkar Senior Resident, Department of Obstetrics and Gynecology, ESIC Medical College and Hospital, Faridabad, Haryana, India

# Manchester repair revisited during the COVID surge: exploring its advantages over conventional restorative surgeries

## Avir Sarkar, JC Sharma, Sonam Jindal and Isha Wadhawan

**DOI:** https://doi.org/10.33545/gynae.2021.v5.i3b.904

#### Abstract

Cervical descent is a major etiology of uterine prolapse. However, true elongation of cervix can cause uterine prolapse without its descent. Most patients find it difficult to come for follow-up visits to hospitals during the ongoing COVID surge. So, they prefer definitive surgeries. Moreover, young patients with prolapse want fertility preservation and subsequent pregnancies. So, we hereby report a case of Manchester operation being performed in a female with cervical elongation who was keen on uterus preservation, thereby analyzing the advantages of this procedure over conventional restorative surgeries for pelvic organ prolapse.

Keywords: COVID, Manchester repair, restorative surgeries, uterine prolapse

## Introduction

Fertility preservation surgery in urogynecology is being looked at more vigorously now. The need for uterine preservation, sexual function and conservative feministic approaches have driven the path towards these restorative surgeries. Prospective longitudinal studies worldwide have demonstrated the role of uterus sparing surgeries being associated with greater improvement in sexual function in pelvic organ prolapse (POP) <sup>[1]</sup>. Although conservative options like Kiegel's exercises and use of vaginal support pessaries come as first option, yet surgery still continues to remain as the definitive treatment modality. Among the fertility preservation prolapse surgeries, Manchester repair, hysterosacrocolpopexy and sacrospinous hysteropexy gain utmost importance. We, hereby, report a case of Manchester repair being done as an alternative to definitive surgery during the COVID pandemic and analyze the advantages of this procedure over conventional restorative surgeries for POP.

## **Case Report**

A 40-year old multiparous lady with 2 living issues presented to gynaecology out-patient department (OPD) with complaints of chronic backache, vaginal discharge and cervical descent for the past 2 years. On examination, there was elongation of cervix with leading edge of cervix descending beyond introitus. Bimanual examination revealed a normal uterus at anatomical location with bilateral normal adnexae. No cystocele or rectocele was visible Figure 1.



Fig 1: Pre-operative assessment of elongated cervical length of 12 cm with no uterine corpus descent, cystocele or rectocele.

Cervical length was measured to be approximately 12 cm. There was no local lesion or erosion present in cervix. A routine PAP Smear was obtained which was negative for any intraepithelial lesions or malignancy. Patient was given the choice of conservative approaches with ring pessary and various surgical options. Considering her keen interest at fertility preservation, we explained to her the option of Manchester repair. Index patient was reluctant for trial of pessary as it was difficult for her to follow-up in OPD owing to the ongoing COVID lockdown. She was eager to go for Manchester technique of cervical amputation and pelvic floor strengthening.

An endometrial aspiration biopsy was obtained in OPD which showed normal secretory endometrium. Pre-operative fitness was taken. Likewise, she was posted for Manchester or Fothergill operation under a saddle block. We wanted to cut short the surgical time and so Manchester operation seemed to be ideal over a conventional Ward-Mayo vaginal hysterectomy. With no underlying medical comorbidities, the procedure took only 20-minutes duration. Intra-operative instillation of diluted adrenaline solution was instilled in the submucosal plane over the cervix. The extent of bladder was reconfirmed with the help of a metallic catheter. There was no cystocele. Cervical extent was rechecked. Leaving behind 2-2.5 cm of residual cervical rim, we went ahead to amputate the rest of the elongated cervix. Blood loss was almost nil following adrenaline instillation. Uterosacral-Mackenrodt complexes were ligated and cut bilaterally at 3 and 9 o'clock positions prior to cervical amputation.

The cervical remnant was reinforced anteriorly with the ligament complex, while posterior lip was strengthened with a Sturmdorff Suture covering the cervical rim with vaginal tissue. Leaving behind no raw surface over the cervix, final position of the uterus was ascertained. There was no residual descent of pelvic organs and pelvic floor was also strengthened with the taut Uterosacral-Mackenrodt complex Figure 2.



**Fig 2:** Post-operative cervical stump being reinforced with Uterosacral-Mackenrodt complex and vaginal mucosa. There was no residual pelvic organ prolapse.

Currently, she is doing well post-3 months of the procedure. Her symptoms have completely relieved. She has been counselled regarding future fertility aspects. It is mandatory to get supervised in next pregnancy since early gestation to avoid risks like recurrent abortions, cervical incompetence and preterm prelabor rupture of membranes.

## Discussion

The Manchester or Fothergill operation was introduced by Archibald Donald in England way back in 1888 <sup>[2]</sup>. Common indications include cervical elongation and fertility preserving

approach for utero-vaginal prolapse for young women who wish to maintain their reproductive capacity. The procedure involves thorough dilatation and curettage followed by cervical amputation after detaching the uterosacral ligaments. The uterosacral-Mackenrodt remnants are reattached to the cervical stump to strengthen it with the help of a Sturmdorff suture. In a longitudinal study, it was concluded that reconstructive surgeries for women with cervical elongation, with or without associated POP, was well received in terms of patient's satisfaction, improved quality of life and sexual function [3].

In a 3-year follow-up in Penang Hospital, Malaysia, the anatomical recurrence rate following vaginal hysterectomy was 4-7%, whereas recurrence was very rare after the Manchester procedure <sup>[4]</sup>. It is thus a good option for young women with cervical elongation or POP. Although a theoretical risk of cervical incompetence does exist in conception after a Fothergill repair, but a study by Tipton RH *et al* described 5 women after Manchester procedure who wished to conceive (out of 82 women) of whom 2 of them had uneventful pregnancies. 1 patient unfortunately suffered a miscarriage and 2 did not conceive <sup>[5]</sup>. So, we take a resolution to monitor all pregnancies being conceived after a Manchester operation to avoid havoc associated with cervical incompetence related recurrent pregnancy losses.

## Conclusion

The Manchester operation is a useful technique of fertility preservation surgery for POP which is making a comeback among the urogynecological society today, more so, during the COVID pandemic when extensive surgeries are better avoided. The risk and complication rates are either equal or lesser than conventional vaginal hysterectomy and successful pregnancies have been described in literature <sup>[6]</sup>. We must pledge to give an option to all young patients with POP to choose for fertility preservation measures as a method of uterine conservation.

## References

- 1. Costantini E, Porena M, Lazzeri M, *et al*. Changes in female sexual function after pelvic organ prolapse repair: role of hysterectomy. Int Urogynecol J. 2013;24(9):1481-1487.
- 2. Fothergill WE. Anterior colporrhaphy and its combination with amputation of the cervix as a single operation. J Obstet Gynecol India 2010;60(6):484-485
- 3. Liebergall-Wischnitzer M, Ben-Meir A, Sarid O, *et al.* Women's well-being after Manchester procedure for pelvic reconstruction with uterine preservation: a follow-up study. Arch Gynecol Obstet 2012;285(6):1587-1592
- 4. Tolstrup CK, Lose G, Klarskov N. Manchester procedure versus vaginal hysterectomy in the treatment of uterine prolapse: a review. Int Urogynecol J 2017;28(1):33-40
- 5. Tipton RH, Atkin PF. Uterine disease after the Manchester repair operation. J Obstet Gynecol Br Commonw. 1970;77(9):852-853
- 6. Park YJ, Kong MK, Lee J *et al*. Manchester operation: An effective treatment for uterine prolapse caused by true cervical elongation. Yonsei Med J 2019;60(11):1074-1080.