

Successful Pregnancy after Novel Uterine Prolapse Surgical Technique: A Case Report at Sinnar Maternity Teaching Hospital

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Abstract

Procidencia is one of complications of pregnancy and childbirth. The challenge of treatment is to preserve fertility if needed and to find effective methods with rapid learning curve. Our technique—Isam technique—fulfills these needs with a short hospital stay, very low risk of complications and relapse, a rapid learning curve as well, and no need for long contraceptive methods after operation.

Keywords

Procidencia, Learning Curve, Pregnancy, Fertility, Isam Technique

1. Introduction

Procidencia is a known complication of pregnancy and childbirth that affects the mother's quality of life, it is more common to present at the end of reproductive life or even postmenopausal but sometimes it occurs early in female life, it may complicate the first pregnancy. Management of uterine prolapse depends on many factors including age, medical fitness for major surgery, fertility issues and hospital setting as well as level of training for treating doctors. However, one of the important factors is community believes, and patient wishes. Pelvic organ prolapse (POP) is a pelvic floor disorder that has affected women's health worldwide, since the dawn of humanity [1] As uterine prolapse can occur at the end of reproductive age, postpartum or rarely during pregnancy it is management could be surgical or non-surgical depending on clinical presentations and surgical experience

of the treating doctor and patient compliance. Often the first nonsurgical option tried is vaginal pessaries. Changes in diet and lifestyle may help to relieve some symptoms, for example; limiting excessive fluid intake may help with urinary incontinence high content of fiber may help with bowel problems. Sometimes a medication that softens stools is prescribed. It's possible that weight loss may help to improve prolapse symptoms. In some cases, Kegel exercises may be helpful [2].

Surgery remains the cornerstone in managing pelvic organ prolapse as a definitive treatment or conservative. Surgery options are: 1) obliterative surgery and 2) reconstructive surgery or 3) hysterectomy. Pelvic reconstructive surgery for POP may be subdivided into numerous different classifications and types of procedures. First, we have an anatomic classification by compartment (anterior, posterior and/or apical). The type of approach may be transvaginal or abdominal, with the latter being feasible by open, laparoscopic or robot-assisted laparoscopic techniques. If an apical prolapse is present, a decision as to whether or not to perform a hysterectomy must be made. And finally, the reconstruction may be performed with or without mesh for additional support, by both transvaginal and abdominal routes. There is no simple, straightforward answer to the complexity of pelvic reconstructive surgery for POP [3].

There is personal variation among doctors in what type of surgery is more suitable for the specific patient and the treating center. There is a continuous need in medical practice to modify treatment options according to ongoing changes in lifestyle and level of care. One of the conservative operations for POP is Purandar hysteropexy. The Purandare hysteropexy technique is one of POP treatments to preserve the uterus. This technique originally uses a rectus sheath as the sling to support uterus at its place, but it had been modified by using mersilene tape/mesh to give more endurance. By using patient rectus sheath, as an autograft, we can offer a better prognosis with less side effect and morbidity compared to using mesh [4]. What is important to mention is that reconstructive surgery whatever the operation needs a long learning curve, needs variable hospital stay, may be unapplicable due to patient co-morbidities and some operations have their own complications that may affect quality of life or need another surgery to correct complications.

2. Case Report

P1 + 1 delivered before 40D at home, it was difficult labor as she mentioned. The patient was complaining of mass from below since delivery and fullness at the vagina. On examination, there is grade IV uterine prolapse with weak pelvic floor and no pelvic or abdominal mass. The plan was to do surgical repair as repositioning of the uterus failed and vaginal pessary was inapplicable. The problem is that the patient is nursing her baby, and she is from rural area distance from the hospital in addition there are technical difficulties in performing any of the known uterine preserving surgeries due to setting defects. We plan to do an operation that needs one day of hospital admission and one or non-post-operative visit in

addition it should preserve fertility, ensure rapid return to normal life and have a good long-term outcome. We informed the patient and her husband about all treatment options and advantages/disadvantages of each method and the technical issues that guide our plan, and the possible complications expected as it is a new technique first time to be used, the patient accept the operation and consented (**Figure 1**, **Figure 2**).

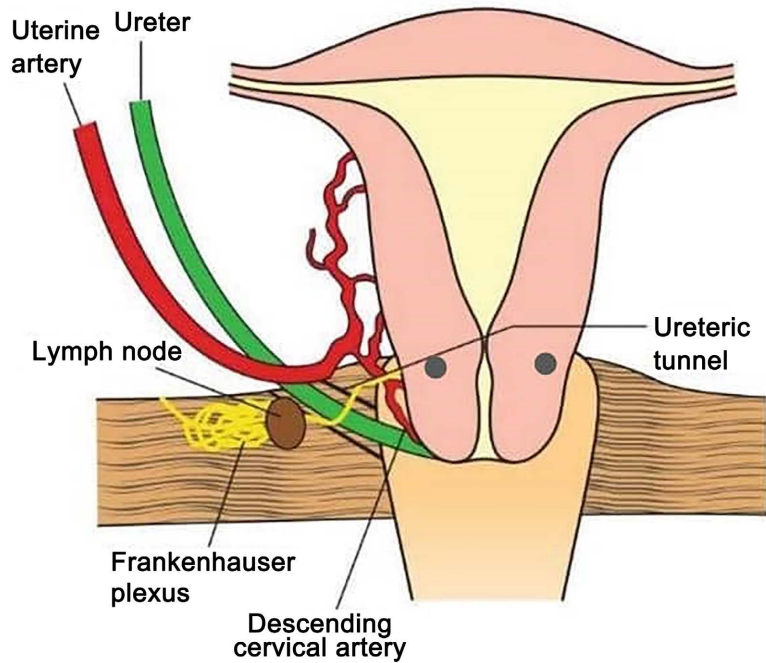


Figure 1. Entrance point of nylon thread.

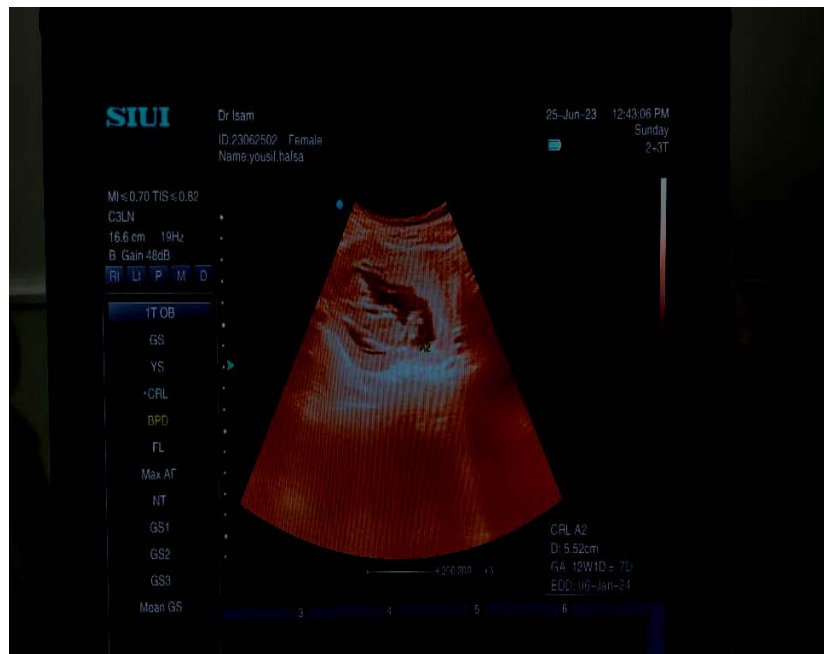


Figure 2. First ultrasound picture after pregnancy.

3. Discussion

Operative technique: After spinal anaesthesia Foley's catheter was inserted to empty the bladder and avoid injuries, cleaning and draping then a mid-line infra-umbilical incision 4 cm below the umbilicus done, the uterus was pulled to be repositioned and nylon size 2 with the rounded needle used to fix the uterus to rectus sheath. The needle passed through the myometrium 2 cm above the level of the cervix entering from left side of the patient and to the back of the uterus, entering again from the back at right side of the patient and at the end we knotted them to be attached to rectus sheath 4 cm above the pubic bone (**Figure 1**). The circle is repeated again and no dissection of the urinary bladder or broad ligament is needed as in Purandar hysteropexy. Rectus sheath closed with vicryl size 2, skin after closed with size 1 vicryl as sub cuticle.

Total time of operation is short, no risk of ureteric or vascular injuries or bladder injury because no need in this operation for tissue dissection or passing near the ureter or main blood vessel.

The post-operative plan was injectable metronidazole and ceftriaxone 24 h, diclofenac injections 24 h and no I.V fluids nor fasting post-operative or urinary catheter in place after the operation. The next day we did a dry dressing for the surgical site and advised to let it be exposed after reaching home and just apply topical zinc oxide cream and resume normal life activity apart from lifting heavy objects, medications were shifted to the oral route. We gave them an informative discharge card with a phone number if she needed to contact us to inquire. The post-operative visit is appointed after three weeks.

The patient came in good condition to the hospital for her appointment and was advised to use progesterone-only pills till her child reaches six months and then combined pills to complete six months after as we accept she will not use long-acting method. No contact again is needed till she presents with 12 weeks +1 day single viable intrauterine pregnancy without complaint and good satisfaction. Her pregnancy went uneventful and no relapse regarding symptoms of pelvic organ prolapse. She completes her pregnancy and is delivered at term by C.S. without complications and with no complaints.

4. Conclusion

The trend of reconstructive surgery is a growing field and copes well with the fact that many ladies start reproductive life late not like before, and some communities have social concern for hysterectomy. But the problem in such operations is that there is a technical concern in these types of operations and some of them are affected by patient fitness for surgery and some by doctors' training level, which are solved in our technique. This method—Isam technique—achieves a lot of advantages: it preserves fertility, short patient hospital stays, no long-term complications such as mesh erosion or fibrosis, and rapid simple learning curve not like other reconstructive surgery techniques. Another important point is that the technique is effective for friable patient with POP and medical complications that

render the known constructive surgery as this technique takes very short operative time and less tissue manipulation in comparison with other operations. We did this operation technique for a total of five patients and they did well after, none of them developed adverse outcomes or symptomatic relapse.

Acknowledgements

To the patient for her acceptance of a novel operation and for opening new hope for the treatment procedure.

Consent

Informed consent was obtained from the patient.

Conflicts of Interest

The authors declare having no conflicts of interest.

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