

## Abdominal Sacrohysteropexy in Young Women with Uterovaginal Prolapse: A Descriptive Study at JLN MCH, Bhagalpur, Bihar

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### Abstract

**Background:** The uterus may protrude into or from outside the vagina, which results in uterovaginal prolapse. Failure of the interplay between the ligaments, fascial supports, and levator ani muscles causes it to happen. Other organs, such as the vaginal walls, bladder, or rectum, are also affected by prolapse. The uterovaginal prolapse might manifest itself in several ways. In order to treat uterovaginal prolapse in young women who want to keep their uterus, the goal of this study is to assess the outcomes of sacrohysteropexy with synthetic prolene mesh as a conservative strategy.

**Methods:** From May 20<sup>th</sup>, 2019, to 20<sup>th</sup> March 2020, the current descriptive study was carried out in the Obstetrics and Gynecology Department of JLN MCH, Bhagalpur, Bihar. There were 120 women overall with uterovaginal prolapse. The anterior longitudinal ligament of the first or second sacral vertebra and the uterine isthmus was connected by synthetic prolene mesh posteriorly with no strain on the mesh, according to the surgical procedure employed in abdominal sacrohysteropexy. The patients' subjective and objective symptom relief for uterovaginal prolapse was questioned. They also had surgical and postoperative problems.

**Results:** There were identified 120 patients. The majority of the ladies were between the ages of 31 and 40. In terms of marital status and parity, 8 women were single, while the other women were all married. 86 patients were in the P1–P4 parity range, while 22 patients were in the P5–P9 range. 42 patients had third-degree prolapse, compared to 78 patients with second-degree prolapse in the uterus. Prolene mesh was used to conduct abdominal sacrohysteropexy on each patient without applying strain. With the aforementioned surgery, there were no intraoperative or postoperative problems seen. None of the patients reported any symptoms of uterovaginal prolapse at the time of discharge, when patients were asked if their uterovaginal symptoms had improved. 32 individuals out of 120 experienced spontaneous pregnancy following abdominal sacrohysteropexy.

**Conclusion:** For young women who desire to keep their uteri, abdominal sacrohysteropexy with synthetic prolene mesh is thought to be the best and safest conservative treatment option for uterovaginal prolapse. This conservative technique has no adverse effects on sexual function and aids in maintaining the anatomy and proper axis of the female reproductive canal. Abdominal sacrohysteropexy has the best success rate and fewest problems of any treatment.

**Keywords:** Sacrohysteropexy, Uterovaginal Prolapsed, Uterus.

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## Introduction

The uterus may protrude into or from outside the vagina, which results in uterovaginal prolapse. Failure of the relationship between the ligaments, fascial supports, and levator ani muscles causes it to happen [1,2]. Other organs, such as the vaginal walls, bladder, or rectum, are also affected by prolapse. The uterovaginal prolapse might manifest itself in several ways. Occasionally it is asymptomatic and discovered by chance during a vaginal exam [3-7]. It can occasionally cause significant symptoms that interfere with women's lives. Lower back pain, a sense of a mass in the vagina, and vaginal discharge are among the symptoms. It may coexist with symptoms of the bladder or bowel. The uterus completely protrudes outside of the vagina in cases of severe prolapse. Moreover, it causes vaginal ulceration, infection, and irritation [8-10].

For a pelvic reconstructive gynaecological surgeon, managing uterovaginal prolapse in young women and those who desire to keep their uterus provides a problem and a moral quandary. Due to the fact that gynaecological operations are often created to address older ladies who do not have any issues with their fertility, uterine conservation, or coital function [6,7]. The surgical goals of the treatment in young women are to address uterovaginal prolapse, maintain a healthy

vaginal axis, and maintain reproductive potential [5-7]. Younger age groups and individuals who want to keep their uterus were treated for uterovaginal prolapse using a variety of techniques [5].

The objectives of this research was to assess the effectiveness of abdominal sacrohysteropexy with synthetic prolene mesh in the treatment of uterine prolapse in younger age group and those patients who want to conserve their uterus.

## Material and methods

From 20<sup>th</sup> May 2019 to 20<sup>th</sup> March 2020, this study was carried out in the Obstetrics & Gynecology department of Jawaharlal Nehru Medical College and Hospital, Bhagalpur, Bihar.

The study included every patient who had undergone sacrohysteropexy. A questionnaire and physical exam were used to assess 120 women who wanted to save their uterus. Age, parity, marital status, desire for fertility, need for anaesthetic, length of surgery, operation type, and mesh type were all examined in each case record. The improvement in both subjective and objective symptoms, as well as postoperative complications, are used to determine the procedure's success rate. It is also noted how the patient's life was altered by the procedure.

## Results

**Table 1: Age Distribution of patients (n=60)**

Age(years)	No. of patients	Percentage
21-30	46	38%
31-40	62	52%
41-50	12	10%

**Table 2: Marital status of patients (n=60)**

Marital status	No. of patients	Percentage
Married	112	93%
Unmarried	8	7%

**Table 3: Parity**

Parity	No. of patients	Percentage
Nulliparous	12	10%
P1-P4	86	72%
P5-P9	22	18%

**Table 4: Type of prolapse**

Type of prolapse	No. of patients	Percentage
2 <sup>nd</sup> degree uterovaginal prolapse	78	65%
3 <sup>rd</sup> degree uterovaginal prolapse	42	35%

**Table 5: Fertility wishes**

108 patients wished to retain their fertility	12 patients had no fertility wishes but retain uterus as an integral part
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Under general anaesthesia, a sacrohysteropexy of the abdomen was performed. The bladder for urination was catheterized. Low transverse incision was used to open the abdomen. The small intestine was packed with the aid of a sponge after the abdomen had been opened. The anterior ligament on the first and second sacral vertebrae was exposed by dissecting off the posterior peritoneum at the level of the sacral promontory. This flap was divided up till the level of the Douglas pouch and the posterior cervicouterine junction. Prolene mesh was then removed. Prolene No. 1 was used to suture one end of the mesh to the anterior longitudinal ligament and the other end to the junction between the isthmus and the posterior cervicouterine. In the sacral hollow and pelvic floor, the mesh was applied without applying any tension. Above the

### Discussion

Numerous women are affected by uterovaginal prolapse. Prolapse can develop to a variety of degrees over a long period of time. Uterovaginal prolapse develops as a result of injury to the muscles supporting the pelvic floor sustained during childbirth. The

mesh, the posterior peritoneal flaps were sealed. The placement of a peritoneal drain. Surgery lasts 60 to 90 minutes. In any scenario, a blood transfusion is not necessary.

There were no intraoperative or postoperative complications with the abdominal sacrohysteropexy. No patient exhibited any signs of uterovaginal prolapse at the time of discharge, according to questions about symptoms and a physical examination.

Regardless of whether the uterovaginal prolapse symptoms were resolved, the procedure's success rate was determined. We think that managing uterovaginal prolapse in younger women is a real-world difficulty when the uterus needs to be preserved. Abdominal sacrohysteropexy has great safety and efficacy in the treatment of these individuals with little side effects.

successful treatment of uterovaginal prolapse requires the preservation of the uterus, which presents a surgical challenge for gynaecological pelvic floor surgery. The goals of these conservative treatments are to alleviate symptoms in women, rectify

uterovaginal prolapse, maintain coital function, and preserve urinary/fecal continence.

120 patients took part in our study. The majority of the ladies were between the ages of 31 and 40. 8 were single, and 112 were married. Most belonged to P1–P4, 108 wanted to keep their fertility, and 12 didn't want to keep their fertility but wanted to keep their uterus as a vital part of them. Leron E, Fritel X, and Demirci F2 [6,7], noted comparable trends. 42 individuals had third-degree prolapse, while 78 patients had second-degree prolapse of the uterus. These findings agreed with the other studies [2,6,7], that were stated.

We conducted abdominal sacrohysteropexy on each patient in the current investigation. There were no more surgical operations carried out. In contrast to this, several investigations by Leron E, Fritel X and Demirci F performed burch colposuspension, posterior repair, and mesh extension anteriorly and posteriorly to correct the cystocele and rectocele [2,6,7].

Most of the individuals in our study had just little rectocele and cystocele. There was no need for additional surgery because the few individuals who had mild cystocele and rectocele did not experience any urine or bowel complaints. By performing a sacrohysteropexy, the uterus was raised to rectify them.

The aforementioned operations took 60 to 90 minutes to complete. All surgical procedures were carried out under general anaesthesia, and their quick postoperative recovery was a plus.

In every patient, we employ prolene mesh. According to some reports, prolene mesh acts strangely and poses a potential risk of infection or erosion to nearby structures where it is located close by. It may have a propensity to form adhesions with the nearby

bowel, which could trigger the development of acute or chronic intestinal blockage symptoms or indications. All of the women received explanations and advice on these potential concerns. Although none of these problems, such as erosion, infection, or rejection of prolene mesh, were seen in our study. We choose to keep using prolene mesh as a preferred material for abdominal sacrohysteropexy surgeries because of its safety profile.

By restoring the anatomy, it is demonstrated that the conservative technique produces satisfactory and long-lasting functional results in terms of the improvement in symptoms in terms of objective/subjective cure.

In our study, the anatomical support is restored by maintaining the normal & functional vaginal axis in all women. The uterovaginal prolapse was fixed at the time of discharge, during the physical examination, and the patients reported a reduction in their symptoms. 32 of the 108 patients had spontaneous pregnancies.

## Conclusion

In terms of symptom improvement, abdominal sacrohysteropexy with prolene mesh is regarded as safe and successful. By restoring the anatomy and aiding in the maintenance of the vaginal axis and coital function in all women who desire to preserve the uterus, it has been demonstrated that the aforementioned conservative method produces satisfying and long-lasting functional results. The outcomes are optimal when there are little difficulties.

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