

## Abdominal Sacrohysteropexy in Young Women with Uterovaginal Prolapse

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Received: 25-06-2023 / Revised: 28-07-2023 / Accepted: 30-08-2023

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Conflict of interest: Nil

### Abstract:

**Background:** Uterovaginal prolapse occurs when the uterus protrudes into or out of the vagina. It occurs when the interaction between the levator ani muscles, fascial supports, and ligaments fails. Prolapse also affects other organs, including the rectum, bladder, and vaginal walls. The prolapse of the uterus can appear in a variety of ways. This study aims to evaluate the results of sacrohysteropexy using synthetic prolene mesh as a conservative technique for treating uterovaginal prolapse in young women who wish to preserve their uterus.

**Methods:** The current descriptive study was conducted in the Obstetrics and Gynecology Department of the DMCH, Laheriasarai, Bihar, between May 2022 and April 2023. The total number of women with uterovaginal prolapse was sixty. The surgical technique used in abdominal sacrohysteropexy joined the anterior longitudinal ligament of the first or second sacral vertebra to the uterine isthmus posteriorly with no tension on the mesh. It was investigated if the patients' uterovaginal prolapse symptoms were both objectively and subjectively relieved. They also experienced issues during and after surgery.

**Results:** Sixty patients were recognized. Most of the women were in the age range of thirty-one to forty. Eight of the women were single, while the remaining women were all married, in terms of marital status and parity. P1–P4 parity accounted for 43 individuals, and P5–P9 parity comprised 11 patients. There were 21 individuals with third-degree uterine prolapse and 38 with second-degree prolapse. Each patient had abdominal sacrohysteropexy with proslene mesh without any discomfort. There were no intraoperative or postoperative issues with the previously described procedure. When asked if their uterovaginal symptoms had improved at the time of discharge, none of the patients had reported any signs of uterovaginal prolapse. Sixteen out of the sixty patients became pregnant on their own after abdominal sacrohysteropexy.

**Conclusion:** Abdominal sacrohysteropexy using synthetic prolene mesh is considered the finest and safest conservative treatment option for uterovaginal prolapse in young women who wish to preserve their uteri. This conservative method helps preserve the female reproductive canal's proper axis and architecture without having a negative impact on sexual function. Of all the treatments, abdominal sacrohysteropexy has the highest success rate and the fewest side effects.

**Keywords:** Sacrohysteropexy, uterovaginal prolapsed, uterus.

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### Introduction

Uterovaginal prolapse occurs when the uterus protrudes into or out of the vagina. It occurs when the connection between the levator ani muscles, fascial supports, and ligaments fails [1,2]. Prolapse also affects other organs, including the rectum, bladder, and vaginal walls. The prolapse of the uterus can appear in a variety of ways. Sometimes it is not symptomatic and is unintentionally found during a vaginal exam [3,4]. On rare occasions, it might result in severe symptoms that complicate women's lives. Symptoms include vaginal discharge, lower back pain, and a feeling of a lump in the vagina. It could be present in addition to

bowel or bladder symptoms. In situations of extreme prolapse, the uterus fully protrudes outside of the vagina. Moreover, it causes vaginal ulceration, infection, and irritation [8,9,10]. Managing uterovaginal prolapse in young women and those who choose to save their uterus presents a challenge and ethical dilemma for a pelvic reconstructive gynecological surgeon. The surgical goals of the treatment in young women are to address uterovaginal prolapse, maintain a healthy vaginal axis, and maintain reproductive potential [5,6,7]. This is because gynecological operations are often designed to address older ladies who do

not have any issues with their fertility, uterine conservation, or coital function [6,7]. Diverse methods were employed to treat uterovaginal prolapse in younger age groups and in those who wished to retain their uterus [5]. The purpose of this study was to evaluate the efficacy of synthetic prolene mesh abdominal sacrohysteropexy in treating uterine prolapse in younger patients and those who desire to preserve their uterus.

### Material and Methods

This study was conducted in the Obstetrics and Gynecology department of Darbhanga Medical College and Hospital, Laheriasarai, Bihar, from May 2022 to April 2023. All patients who had

undergone sacrohysteropexy were included in the study. Sixty women who desired to save their uterus were evaluated by a medical examination and questionnaire.

Each case record included an examination of the following factors: age, parity, marital status, desire for fertility, requirement for anesthesia, length of surgery, kind of procedure, and mesh type. The success rate of the surgery is assessed based on the reduction of postoperative problems and both subjective and objective symptoms. It is also mentioned how the procedure changed the patient's life.

### Results

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

Age(years)	No. of patients	Percentage
21-30	23	38%
31-40	31	52%
41-50	6	10%

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

Marital status	No. of patients	Percentage
Married	56	93%
Unmarried	4	7%

**Table 3: Parity**

Parity	No. of patients	Percentage
Nulliparous	6	10%
P1-P4	43	72%
P5-P9	11	18%

**Table 4: Type of prolapse**

Type of prolapse	No. of patients	Percentage
2 <sup>nd</sup> degree uterovaginal prolapse	39	65%
3 <sup>rd</sup> degree uterovaginal prolapse	21	35%

**Table 5: Fertility wishes**

54 patients wished to retain their fertility	6 patients had no fertility wishes but retain uterus as an integral part
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An abdominal sacrohysteropexy was done while the patient was under general anesthesia. A catheter was used to empty the bladder. The abdominal cavity was opened with a low transverse incision. The abdomen was opened, and the small intestine was filled using a sponge. By cutting the posterior peritoneum at the sacral promontory level, the anterior ligaments of the first and second sacral vertebrae were made visible. This flap was separated all the way to the posterior cervicouterine junction and the Douglas pouch. Next, the prolene mesh was taken out. One end of the mesh was sutured to the anterior longitudinal ligament using Prolene No. 1, and the other end was sutured to the point where the posterior cervicouterine and isthmus meet. The mesh was put tension-free to the pelvic floor and sacral hollow. The flaps covering the posterior peritoneum were sealed above the mesh. The peritoneal drain's location. A 60-to 90-minute surgery takes place. There is never a need for a blood transfusion. The abdominal

sacrohysteropexy did not result in any problems during or after surgery. An examination and queries regarding symptoms revealed that no patient at the time of discharge had any symptoms consistent with uterovaginal prolapse. The success percentage of the procedure was established, regardless of whether the symptoms of uterovaginal prolapse were alleviated. We believe that when the uterus needs to be conserved, controlling uterovaginal prolapse in younger women is a practical challenge. When treating these patients, abdominal sacrohysteropexy is quite safe, effective, and has few adverse effects.

### Discussion

Uterovaginal prolapse affects a lot of women. Prolapse can progress over an extended period of time to different degrees. Damage to the muscles supporting the pelvic floor during labor results in uterovaginal prolapse. The preservation of the

uterus is necessary for the effective treatment of uterovaginal prolapse, and this poses a surgical challenge for pelvic floor surgery in gynecology. These conservative treatments aim to relieve women's discomfort, treat uterovaginal prolapse, keep coital function intact, and maintain urine and fecal continence. In this study, sixty patients participated. Most of the women were in the age range of thirty-one to forty. 56 people were married, and 4 were single. The majority, or P1–P4, desired to maintain their fertility, whereas 6 did not, although they did want to preserve their uterus as an essential component of them. Similar tendencies were seen by Leron E, Fritel X, and Demirci F [2,6,7]. 39 patients experienced second-degree uterine prolapse, compared to 21 who experienced third-degree prolapse. These results concurred with those of the other mentioned research [2,6,7].

In the current study, we performed abdominal sacrohysteropexy on every patient. No more surgical procedures were performed. On the other hand, in order to treat cystocele and rectocele, Leron E, Fritel X, and Demirci F conducted multiple experiments using burch colposuspension, posterior repair, and mesh extension anteriorly and posteriorly [2,6,7]. The majority of the participants in our study exhibited just mild cystocele and rectocele. The few patients with moderate rectocele and cystocele did not have any bowel or bladder issues, therefore no further surgery was required. To correct these, a sacrohysteropexy was performed, raising the uterus. The aforementioned procedures took between sixty and ninety minutes to finish. A benefit of all surgical operations under general anesthesia was their speedy recovery after surgery. We use prolene mesh on each patient. Some studies state that prolene mesh behaves weirdly and that buildings close to it may be at risk of infection or erosion due to its proximity. It might have a tendency to adhere to the adjacent colon, which could lead to the emergence of signs or symptoms of either acute or chronic intestinal blockage.

The women were given clarifications and guidance on these possible issues. However, none of these issues such as prolene mesh rejection, infection, or erosion were present in our investigation. Because of its safety profile, prolene mesh is still the material of choice for abdominal sacrohysteropexy procedures. It is shown that the conservative approach yields good and durable functional effects in terms of the improvement of symptoms in terms of objective/subjective cure by restoring the anatomy. According to our research, all women's vaginal axes remain normal and functional, restoring the anatomical support. During the physical examination at the time of discharge, the

uterovaginal prolapse was corrected, and the patients reported a decrease in symptoms. Out of the 54 patients, 16 became pregnant on their own.

### Conclusion

Abdominal sacrohysteropexy using prolene mesh is thought to be safe and effective in terms of symptom relief. It has been shown that the above conservative approach yields pleasing and durable functional outcomes by restoring the architecture and supporting the maintenance of the vaginal axis and coital function in all women who wish to keep the uterus. When there are few obstacles, the results are at their best.

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