



Adhesion Barrier Gel for Intrauterine Surgery

CASE REPORT

Adhesions following MIUA, with Partial Uterine Septum



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Case Introduction

A 35-year-old woman with a desire for pregnancy and a diagnosis of intrauterine adhesions following an intrauterine aspiration for spontaneous abortion and partial uterine septum. She underwent hysteroscopy with lysis of adhesions, septoplasty, and the application of Oxiplex/IU Gel to prevent the formation of new adhesions. The follow-up hysteroscopy (40 days) revealed a uterine cavity of regular shape and volume with no intrauterine adhesions present.

Case Presentation

The patient had a 6-week pregnancy and while undergoing an obstetric ultrasound, it was revealed a viable pregnancy and a suspected septate uterus with the differential diagnosis of a left cornual pregnancy.



Three-dimensional transvaginal ultrasound image showing a gestational sac with an embryo implanted in the upper portion of the cavity and a possible septate uterus (Fig. 1).



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Three-dimensional transvaginal ultrasound image performed after aspiration demonstrates a septate uterus.

At eight weeks, the patient experienced a spontaneous abortion, and an intrauterine aspiration was performed without complications.

Following the procedure, a three-dimensional transvaginal ultrasound was performed, confirming the diagnosis of a partial uterine septum, with the presence of a muscular septum measuring 1.5 cm in depth and 4.2 cm in interostial distance (Fig. 2). Additionally, in the two months following the aspiration, the patient developed amenorrhea and the possibility of intrauterine adhesions as a post-procedure complication.

Given the patient's clinical situation and desire for reproduction, it was proposed to perform a surgical hysteroscopy to remove any intrauterine adhesions and to correct the septum through septoplasty. To prevent the formation of new adhesions, the application of **Oxiplex/IU Gel** was suggested at the end of the procedure.

Operative Approach

A surgical hysteroscopy was performed in the operating room using the Bettocchi hysteroscope with saline solution used as the uterine distension medium at an approximate pressure of 60 mmHg. Cervical canal adhesions were initially observed and disassembled using a grasping 5-Fr instrument (Fig. 3). After experiencing difficulty accessing the uterine cavity, a cavity of regular volume was revealed with the presence of a partial fundal septum measuring approximately 2 cm. Adhesions were also present in the left cornual region, the previous site of gestational sac implantation (Fig. 4). Using 5-Fr scissors, the adhesions in the left cornual region were lysed.





After the lysis of adhesions, the hysteroscope was removed. Cervical dilation was performed up to a Hegar dilator size 9, and a 27-Fr resectoscope with a Collins-type bipolar loop was introduced through the cervical canal.



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The approach to the uterine septum was performed using the Collins loop in the cutting mode, with resection of the septum through the medial portion of the septation. This was achieved with smooth and well-directed movements of the cutting loop, guided from the apex toward the base of the septum. The septoplasty was considered complete when both tubal ostia were clearly visible, the fundal region was in contact with the myometrium, and small myometrial vessels were present in the uterine fundus. To prevent the formation of new intrauterine adhesions, Oxiplex/IU GeI was applied under direction vision at the end of the procedure. The procedure proceeded without complications and the patient was discharged on the same day.

Post Procedure

The patient experienced mild vaginal bleeding for 5 days and mild post-procedure dysmenorrhea, with no need for analgesics. After 40 days, a second look hysteroscopy was performed in the office using the Bettochi hysteroscope. The cervical canal appeared patent, with no signs of stenosis or adhesions (Fig. 5) as was observed during the earlier surgical hysteroscopy. Additionally, both the septum resection site and the left cornual region showed no adhesions (Figs. 6,7).





Fundal region, the site of septum resection.

Left cornual region, the area with previous adhesions.



In the panoramic evaluation, a uterine cavity of regular volume and shape was observed with **no evidence** of intrauterine adhesions.

Conclusion

This case emphasizes the importance of an individualized approach in patients with uterine abnormalities, especially when reproductive desires are involved. Hysteroscopy, along with the application of Oxiplex/IU[®] Gel (FzioMed, Inc., San Luis Obispo, CA, USA), represents the ideal strategy for treating intrauterine adhesions and correcting uterine septa, aiming to reduce the risk of new adhesion formation and optimize the chances of future pregnancies.