



## Videolaparoscopic Treatment of Deep Endometriosis Using Oxiplex/AP®

Patient had deep endometriosis, with Intestinal involvement.



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### Case Introduction

A 35-year old patient was diagnosed with deep endometriosis which spread to her intestines. She had no comorbidities, a history of smoking, allergies to dipyrone, and a desire for pregnancy.

### Case Presentation

The patient was referred for further evaluation by the basic health unit, after complaints of progressive pelvic pain since menarche, worsening during her period. She had dyschezia and chronic constipation with bowel movements every 3 days. The patient started using dienogest 2 mg/day in 2022 with good symptom control. She had amenorrhea with a desire to be pregnant.

### Exams

Several exams were done to investigate the issues. On vaginal exam, an intrapelvic, retroverted, fixed uterus and non-palpable adnexa with bilateral thickening of the uterosacral ligaments with hardening in the region of the vaginal fornix, involving a nodule in the vagina of approximately 3cm were found. During a rectal exam, a bulging in the rectal wall was seen approximately 5cm from the anal verge.

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During the complimentary exams, the transvaginal ultrasound on 01/27/24 showed: uterus with a volume of 49cc, homogeneous myometrium with an irregular functional zone, the right ovary with a volume of 2.8 cc, and the left ovary with a volume of 5.9cc. There was also thickening of the left Fallopian tube, and a slight thickening of both round ligaments. The Irregular hypoechoic retrocervical tissue measured 3x2.2cm extending to bilateral uterosacral ligaments, with peritoneal invasion measuring 7mm, a lesion invading the myometrium in the posterior wall with a mantle lesion measuring 2.7x0.8cm, with a 3mm invasion firmly adhered to the intestinal lesion 12cm from the anal verge.

There was also thickening in the posterior vaginal fornix of 2.7x2.6x1.7cm that adhered to the vaginal septum and a lesion in the septum measuring 1.8x1x.4cm. The thickening in the rectum involved 28% of the circumference measuring 6x.9x.4cm, 5cm from the anal verge, firmly adhered to the rectovaginal septum. This extended to the right pararectal region, involving the parametrium, paracolpos, iliococcygeus muscle, inferior hypogastric plexus, and right hypogastric nerve. The ureter free distance from the lesion was 3mm and another intestinal lesion involving 18% of the circumference measuring 1.7x.4x.9cm was firmly adhered to the retrocervical lesion.

### Operative Approach

Figure 1: Cavity inventory: presence of adhesions between the uterus, left ovary, and sigmoid colon with the left ovarian fossa completely inaccessible.

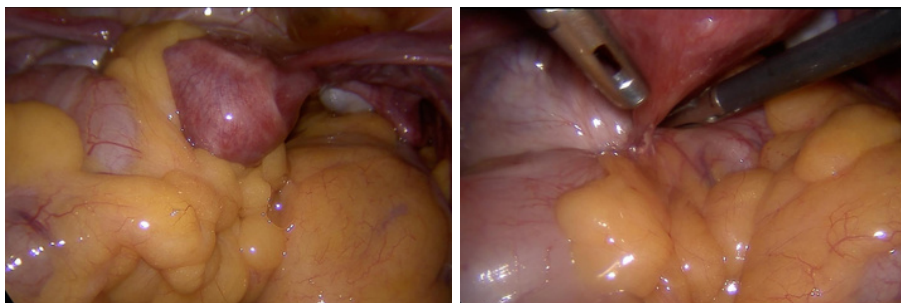
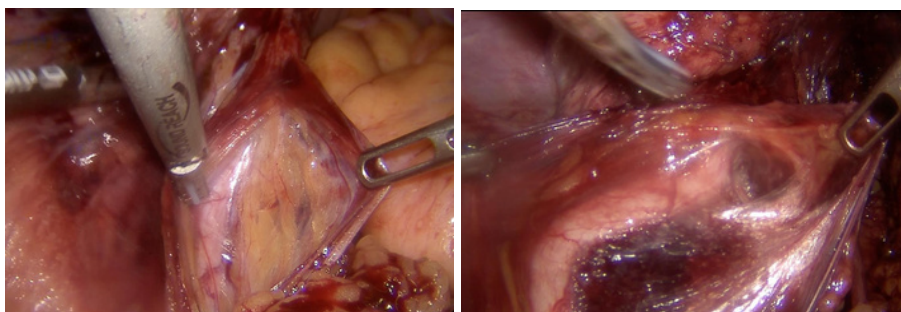


Figure 2: Left ureterolysis was performed to identify the structures for better release of adhesions and resection of endometriosis lesions.



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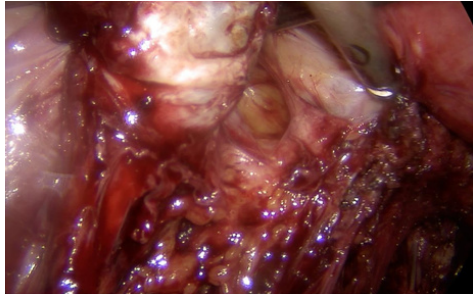


Figure 3: Release of the left ovarian fossa using ultrasonic energy, allowing for the delineation of all structures.

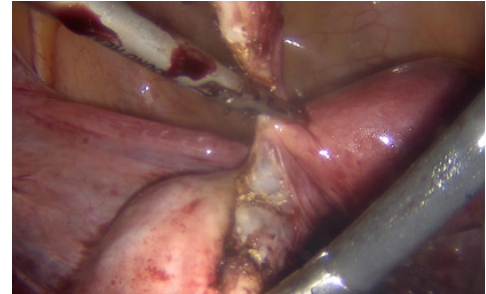


Figure 4: Left salpingectomy performed using ultrasonic energy.

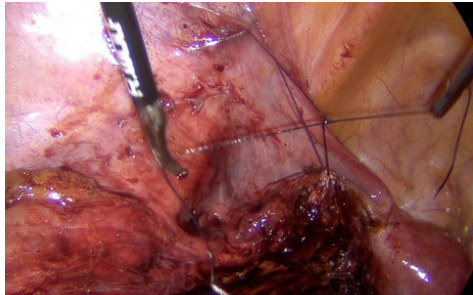


Figure 5: Left ovary fixed for better presentation of the surgical field.

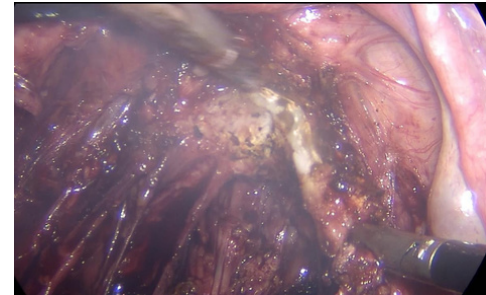


Figure 6: Resection of endometriosis lesion in the rectovaginal septum with release of hemosiderin.

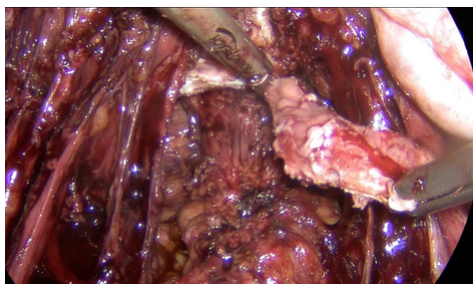


Figure 7: Vaginal opening and resection of vaginal endometriosis lesion.

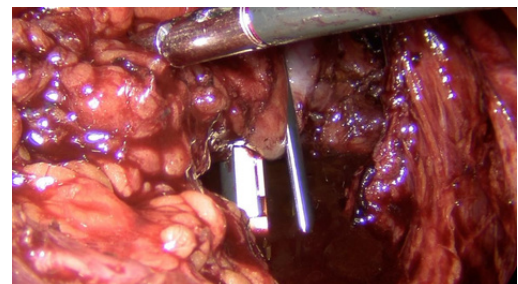


Figure 8: Segmental resection of the intestinal lesion was chosen and performed using the Nose technique for stapling.

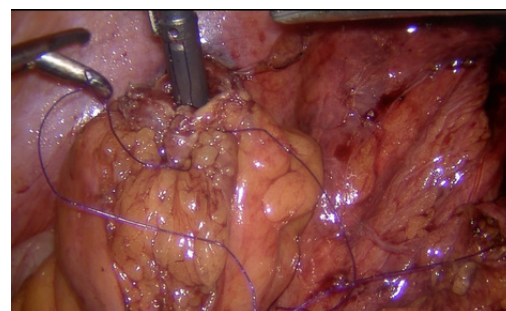
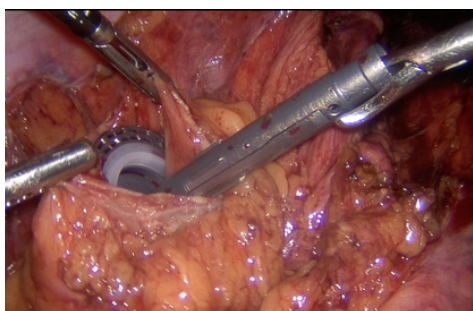


Figure 9: Laparoscopic preparation of the proximal intestinal segment for primary anastomosis.



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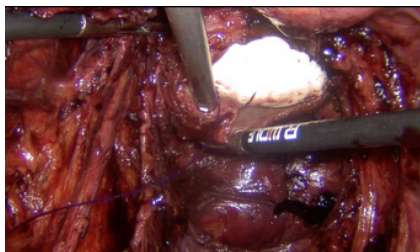


Figure 10: Suturing of the vagina using barbed PDS 2 suture prior to primary anastomosis.

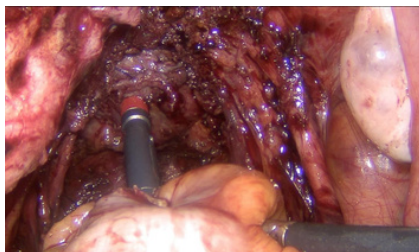


Figure 11: Circular stapling for primary anastomosis.



Figure 12: Chromotubation was performed with evaluation of the right Fallopian tube which was found to be patent.

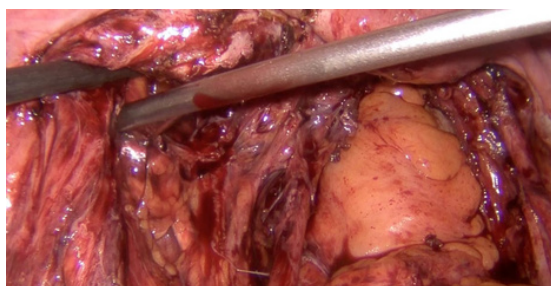
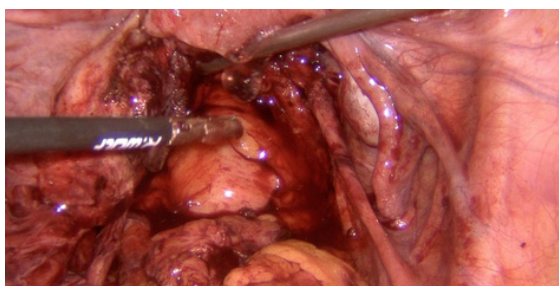


Figure 13: At the end of the procedure, Oxiplex/AP gel was applied in the region of the rectovaginal septum and the left ovarian fossa to reduce post-surgical adhesions.

### Discussion

Patients with adnexal endometriosis are more likely to develop postoperative adhesions.

The use of Oxiplex/AP® (FzioMed®, San Luis Obispo, CA, USA) is safe for laparoscopic use and reducing postoperative adhesions.

A reduction in adhesions in the adnexal region was found when Oxiplex/AP was used compared to surgery without gel, in multicenter studies. These studies are cited below.

### Conclusion

The postoperative follow-up was satisfactory, and the patient plans to allow for pregnancy in 90 days.

### References

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