# Advancing Health A CASE STUDY from MedStar Washington Hospital Center

## *Treating Severe Endometriosis:*

## Minimally Invasive Laparoscopic Surgery

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#### **Abstract**

A 44-year-old female was diagnosed with endometriosis, following years of progressively worsening pain during menstruation and recent infertility. Laparoscopic surgery removed endometriosis from the pelvis, ovaries, rectum, bladder, uterus and fallopian tubes. The procedure resulted in an immediate cessation of pain, and allowed the patient to pursue pregnancy by natural or in vitro fertililization.





### **CASE STUDY**

## Minimally Invasive Laparoscopic Surgery

#### **Patient Presentation**

- A 44-year-old female presented with progressively worsening menstrual pain, to the point that it occurred on an almost daily basis. The patient was also experiencing painful urination and bowel movements, especially during menstrual periods.
- Ibuprofen was no longer effective in treating the pain. The patient was unable to use birth control medication as a remedy due to undesirable side effects.
- The patient had attempted for two years to become pregnant without success and was now unable to be sexually active.

#### **Assessment**

- MRI revealed bilateral ovarian endometriomas without evidence of deeply infiltrative disease. The left fallopian tube was also dilated and fluid filled.
- The patient had a retroflexed and fixed uterus which was very tender to palpation. She had bilateral uterosacral and rectovaginal tenderness and nodularity appreciated on rectal examination suggestive of rectovaginal disease. She had bilateral adnexal fullness and tenderness consistent with her known ovarian endometriomas. She also had bilateral spasm and tenderness to her levator ani muscles making vaginal entry painful.

 The patient expressed a desire to retain her uterus if possible, in the hope of becoming pregnant.

#### **Treatment**

- Laparoscopic surgery confirmed stage 4 endometriosis, with endometrial tissue and scarring obliterating the normal pelvic spaces. The uterus and cervix were adherent to both the rectosigmoid colon and both ovaries. The ovaries were adherent to the pelvic sidewalls overlying the ureters and contained large chocolate cysts. Endometriosis also extended into the anterior cul-de-sac causing bladder contraction and adhesions to the anterior surface of the uterus.
- The surgery included mobilization of both ureters and the rectum with excision of endometriosis from the pelvic side walls, uterosacral ligaments, the uterus, the rectum, and the bladder. Rectal serosal integrity was restored with a suture repair. Endometriomas were resected from the ovaries and the ovaries were repaired using purse string sutures.
- The left fallopian tube was found to be damaged beyond repair and was removed. However, the right tube appeared relatively healthy and functional and was left in place.
- Cystoscopy and rectal integrity testing were performed to assess for injury prior to concluding the case.



James K. Robinson, MD

"Even in its most limited form, endometriosis is a condition that can cause significant discomfort and affect a woman's long-term health and fertility. As minimally invasive laparoscopic surgical technologies have advanced, so too has our ability to successfully treat this condition in all its forms. We can also minimize its effects on the ovaries and uterus, increasing the chances of successful natural conception and pregnancy."

#### **Outcomes**

- Patient reported an immediate reduction in pain upon awakening from anesthesia. At her two-week follow-up examination, the patient reported no further pain issues.
- While the condition of the right fallopian tube preserved the potential for normal conception, the patient elected to pursue in vitro fertilization.
- The patient will require some form of hormone suppression therapy, which will be determined following her pregnancy. Given her history of not tolerating systemic hormones she will likely consider local treatment with a progestin containing IUD.

#### **Conclusion**

- Laparoscopic surgery is the best option for successfully diagnosing and treating severe endometriosis, while allowing for preservation of a patient's fertility in almost all cases.
- Given the complexity of these cases and the potential for injury to adjacent structures, surgery should be referred to surgeons with experience operating in the retroperitoneum and surgically managing complex pelvic pathology.
- Surgeon's treating severe endometriosis should have ready access to well trained consultative services including colorectal surgery, urology, and vascular surgery.

To refer a patient, or to schedule an informational interview with Dr. Robinson, please call **202-877-6526**.

To learn more about advanced pelvic surgery at MedStar Washington Hospital Center, visit **MedStarWashington.org/Urogynecology**.



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Our expertise includes medical and minimally invasive surgical management of:

- Abnormal uterine bleeding: Including office-based hysteroscopy for treatment of endometrial polyps, intrauterine adhesions, uterine septum, heavy menstrual bleeding, and retained IUDs
- Severe and deeply infiltrating endometriosis
- Uterine fibroids (both fertility sparring and not)
- Chronic pelvic pain
- Asherman's Syndrome (intrauterine adhesions)
- Pelvic floor disorders
- Sexual dysfunction



