Researchers at the University of South Florida have developed a device that can enable both the removal of abdominal pelvic masses and the introduction of instruments into the peritoneal cavity.

With a growing market for minimally invasive surgical instruments, particularly in the area of gynecology, the use of a natural access port has become more common. The ideal instrument would be designed to be used through the vagina, eliminating going through the patient’s abdominal wall, and would be customizable with multiple size internal obturators.

Currently, there are no commercially available vaginal ports that enable both removal of abdominal/pelvic masses while also allowing introduction of instruments into the peritoneal cavity. Existing laparoscopic ports are also limited in size, typically 5 to 12 mm. Larger ports require larger incisions in the abdominal wall, which can increase scarring, post-op pain and risk of hernia formation.

Our inventors have designed an instrument that addresses these issues along with the major challenges of performing a sacrocolpopexy procedure, particularly in suturing the Y-shaped mesh to a flat surface on the front of the vagina, and then accessing deep in the posterior cul-de-sac to suture the Y-shaped mesh in this area. This new device would be the first commercially available vaginal port that enables both removal of abdominal/pelvic masses and allows instruments into the peritoneal cavity.

**ADVANTAGES:**
- Decreased post-op pain,
- Reduced scarring
- Lower risk of hernia formation
- Designed for sacrocolpopexy procedure

First Commercially Available Vaginal Port

Front View of Vaginal Port with Obturator Showing Semi-Flat Surface for Suturing

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