Researchers at the University of South Florida have developed a device that can efficiently remove tissues and specimens from a woman’s abdominal cavity following laparoscopic surgery.

Laparoscopic surgery involves making of small incisions (5-12 mm) in the patient’s abdomen through which surgical instruments are inserted. These instruments are used to dissect and remove tissues which are several centimeters in diameter. One of the problems associated with these devices has been the removal of large pathologic specimens without making a large incision. Large incisions cause more scarring and increase risk of herniation. In females, it is possible to access the abdominal cavity through the vagina which is sufficiently elastic to allow removal of larger samples. However, currently there are no devices in the US market which utilize this mode of tissue removal.

Scientists at USF have developed the Trans-Vaginal Specimen Extraction Device (TVSED) which is a novel design that enables insertion of a deployable specimen bag into a woman’s abdominal cavity. This makes extraction of large, multi-centimeter specimens through the woman’s vagina convenient. TVSED eliminates the need for morcellation of tissue within the abdominal cavity or enlarging the size of incisions in the abdominal wall to remove specimens. Furthermore, it allows for minimal scarring and reduced post-operative pain, in addition to faster recovery following surgery. Thus, this invention provides an effective and convenient method to access a woman’s abdominal cavity through the vagina and extract tissues during minimally invasive surgery.

**ADVANTAGES:**
- Convenient access to the abdomen
- Eliminates the need for tissue morcellation
- Minimal scarring and reduced post-operative pain
- Reduces risk of potential herniation

**Safe and Efficient Removal of Pathologic Specimen and Tissue During Laparoscopy**

**A Computer-Aided Design Featuring the TVSED**

Tech ID #: 11B192

**Patent #: 9,789,268**