

Laparoscopic Hernia Mesh Spreader

Researchers at the University of South Florida have invented a novel laparoscopic device to enhance the efficiency of minimally invasive surgery for hernia repair.

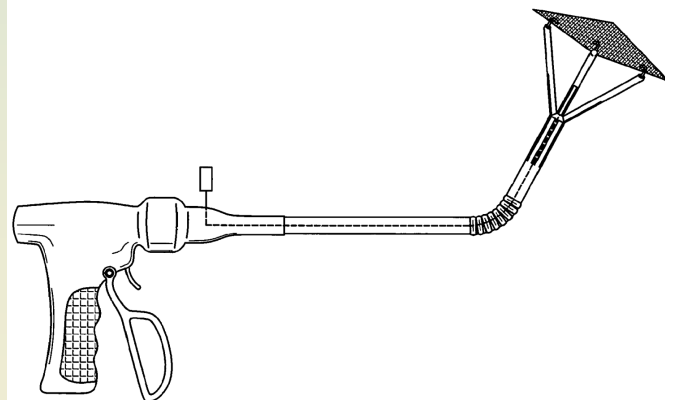
A hernia is a common medical condition where a part of an abdominal organ squeezes through a weak spot in the surrounding abdominal wall. Hernia repair may be completed by open surgery; however, minimally invasive surgical tools have enabled surgeons to avoid such disruptive procedures. Laparoscopes are rod-shaped surgical instruments which can be inserted through a small incision in the abdomen. In hernia repair, laparoscopes are used to guide and apply a reparative “mesh” material to the damaged site, however current approaches to inserting such a mesh are cumbersome. There is a need for a laparoscopic device for efficiently applying a surgical mesh to repair a hernia that requires a minimal number of incisions.

USF inventors have developed a novel laparoscopic device for treating hernias. The device has four small arms that hold, spread, position, and attach a mesh material to the abdominal wall in one action, through a single incision. It features a hinge for maneuverability, and allows the surgeon to move the four arms individually. These features enable the successful and efficient placement of a surgical mesh with minimal incisions, thereby decreasing operating time. This improved hernia repair tool will reduce chances of infection and allow surgeons to limit the time patients must be under anesthesia.

ADVANTAGES:

- Reduces operating time
- Enables less invasive surgery
- Easy maneuvering and placing of mesh
- Less potential for wound infection or anesthesia-related complications

Novel Device Improves Efficiency and Ease of Laparoscopic Hernia Repair



Drawing of the Laparoscopic Device Holding the Surgical Mesh

Tech ID # 05A028

Patent #: [8,097,008](#)