Docket #: S19-226

Improved method and device for closing abdominal fascial closure after laparotomy

Stanford researchers have developed a new method and medical device to close the abdominal wall fascia after laparotomy to reduce the incidence of incisional hernias. Incisional hernias occur in nearly 50% of high risk patients leading to costs of about $3B annually.
This invention is a double pledged device with bio-absorbable fasteners that close incisions using a stapling motion. As compared to current techniques using sutures and mesh, this invention is more efficient, reduces infection risk, and decreases incisional hernia rate.

Video

Stage of Development

- Prototype

Applications

- Abdominal wall fascial closure
- Incisional hernia closure

Advantages

- Automated device
- Reduces the incidence of incisional hernias
- Reduces the complications and expense from abdominal hernias after surgery
- Less chance of infection as compared to mesh technique
- Advantages over the needle and suture technique:

    - Lower incidence of incisional hernia due to less tension on the suture line
    - Faster healing time
    - Less chance of infection due to less manipulation of tissues
- Surveyed surgeons and patients prefer this solution over the current methods

Patents

- Published Application: WO2020252430
- Issued: 12,324,575 (USA)

Innovators

- Aussama Nassar

Licensing Contact

Seth Rodgers

Licensing Manager, Life Sciences

Email