A Better Way to Close the Abdominal Wall Fascia after Laparotomy to Reduce the Incidence of Incisional Hernias

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PATIENT JOURNEY

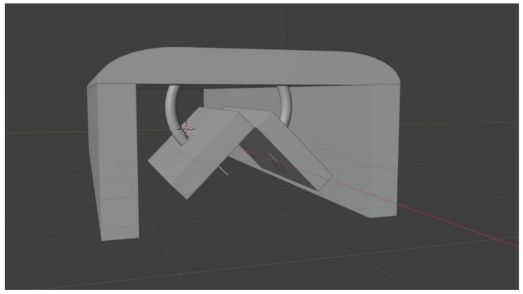
1/3th
of patients will develop **incisional hernia** after abdominal surgery

- Patient gets abdominal surgery
- Resident closes abdominal wall with traditional needle & sutures techniques
- Due to uneven tension in sutures, "button-holing" causes a painful **Incisional Hernia (IH)**
- The patient has to be readmitted to the hospital and get surgery again

The patient gets incisional hernia at unpleasant timing, such as while coughing or while enjoying dinner.

PROTOTYPE

Skin Stapler as example of our prototype



3D Model of the Closing Mechanism

CLINICAL NEED

Laparotomy incisions are traditionally closed using the **Small-Bite Technique**

However, the Small-Bite Technique is

1) Time-consuming
2) Labor intensive
3) Exposes patients to additional anesthesia
4) Heightens the risk of Intra-operative Infection

Recent solution:

Closure with Mesh

Technically challenging + Additional risks

Hence, there is an **unmet clinical need** for an automated fascial wall closure device to close abdominal fascia after laparotomy

ECONOMICS

$4.5 BILLION
estimated annual healthcare expenditure for Incisional Hernia (IH)

$1 BILLION
estimated market potential for fascial closure devices designed for high-risk patients

REGULATORY PATHWAY

U.S. Patent Application is currently **pending**

FDA Class 2 Medical Device

subject to **510(k) clearance**

WANT TO LEARN MORE?

Check out some prototypes and talk to the team!