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## **PREVENTING INCISIONAL HERNIA POST EMERGENCY SURGERY LAPAROTOMY- A NEW TECHNIQUE FOR ONLAY MESH INCORPORATION (iPOMP)**

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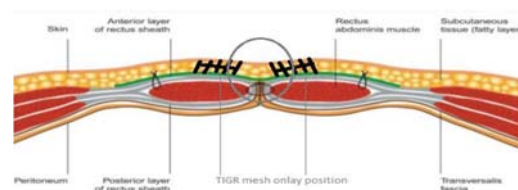
**Background:** Incisional hernia in occur in about 30% of patients post emergency surgery. Reinforced abdominal wall closure is gaining traction and on-lay mesh is increasingly used even in the presence of intra-abdominal sepsis . Incorporating the mesh itself with the fascial closure suture, rather than just on top has some theoretical advantages.

**Aim**This study describes a new technique of incorporating mesh into the primary fascia closure and reports on early outcome post emergency laparotomy.

**Methods:** An ethically approved study was undertaken at Letterkenny University Hospital in July 2018 of consecutive patients undergoing emergency laparotomy for abdominal sepsis with onlay TIGR® mesh (Novus Scientific, Uppsala, Sweden) insertion. Mesh was sutured to the anterior rectus fascia with continuous 2/0 prolene over 4 cm wide from the fascia edge. Placement was facilitated by after a 4cm clearance of the linea . The mesh was incorporated into the fascia closure in all cases with either 1 nylon large bite approach in 5 and 2/0 prolene in a small bite 5 mm approach. . All patients received a wound bundle to reduce SSI incorporating wound protectors, double gloving, antibiotic, wound washout, peritoneal washout, subcutaneous suturing and incisional negative pressure therapy.

**Results:** The procedure was performed in 9 patients (6 female, mean age 68 , range 32-84 ),all with purulent peritonitis . The median APACHE II score was 14 (range 7-15 ), median POSSUM predicted mortality was 18.4%. No incisional hernia were recorded in this case series. One superficial SSI was recorded at 40 days. One patient died at 10 day post-operative of central line sepsis.

Figure 1 Suture incorporating on-lay mesh . (video to be shown )



**Conclusion:** Initial experience with an incorporated onlay mesh technique in septic patients is encouraging. While long term follow up is required, it adds a strengthening buttress to fascial closure and theoretically may be superior to a standard onlay.