

Surgical Technique: Prophylactic Mesh Placement in Radical Cystectomy with Ileal Conduit to Prevent Parastomal Hernia



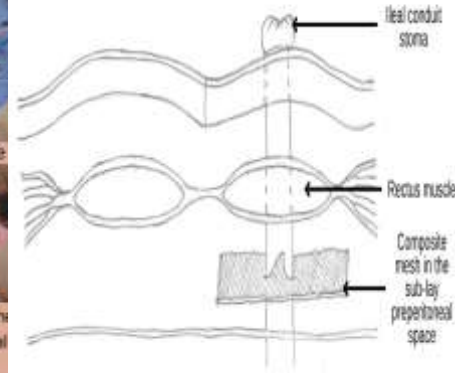
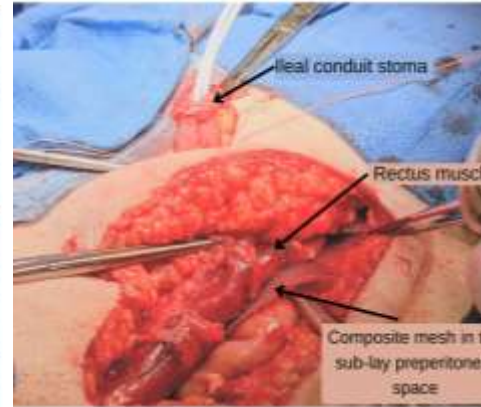
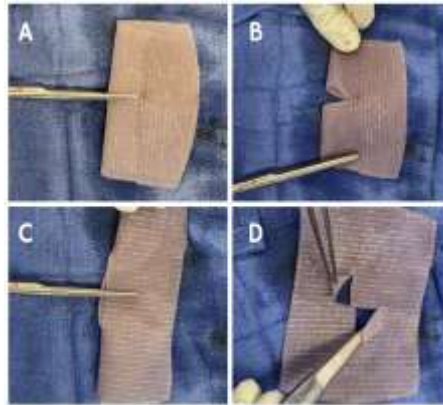
Miami Cancer Institute
BAPTIST HEALTH SOUTH FLORIDA

Mohamed Javid Raja Iyub*, Pushan Prabhakar, Deerush Kannan Sakthivel, Orlando Brito Martinez, Murugesan Manoharan

Background

- Parastomal Hernia (PH) is a well-known complication following ileal conduit (IC).
- Prophylactic mesh placement is done to prevent the occurrence of PH.
- The available limited literature shows that a prophylactic mesh is safe with minimal mesh-related complications in the postoperative period.
- We describe our steps for prophylactic mesh to prevent a PH in patients undergoing RC with an IC.

Surgical steps



Step 1: Cruciate incision on mesh

- A custom mesh of ~ 8 x 8 cm is used, and a 2 x 2 cm cruciate incision is made in the centre.
- **Advantage:** The cruciate incision, along with the flaps created, allows greater conformity of the mesh to the diameter of the stoma when it is passed through.

Step 2: Mesh placement

- A preperitoneal space between the posterior rectus sheath and the peritoneum is developed, and placement of the mesh in this preperitoneal plane (sublay-preperitoneal technique).
- **Advantage:** This plane for mesh placement has reduced vascularity compared to the space between the rectus muscle and the posterior rectus sheath.

Step 3: Externalization of IC

- The mesh is placed with the cruciate opening lined up for the stoma to be brought through.
- **Advantage:** No sutures are used to anchor mesh.
- Following this, the ileal conduit is brought through the peritoneum, pre-peritoneal mesh, rectus muscle, subcutaneous tissue, and skin to form the standard stoma.