

Inguinal Hernia repair with a 3D MAX Mesh

P D'Agostino, P Hauters.

Clinique Notre-Dame, Tournai, Belgium.

Abstract

Aim

Presentation and interest of the prosthetic Bard 3D Max Mesh in laparoscopic hernias repair.

Case report

TAAP repair of a right indirect inguinal hernia in a 36 year-old-man heavy worker.

Video

A pneumoperitoneum is created in the usual fashion with a Veress needle. The first 10mm trocar is inserted in sub-umbilical position. The intra-abdominal cavity is visualized with the telescope. Two others 5mm right and left lateral trocars are used.

The peritoneal incision is made using scissors from the lateral aspect of the inguinal region to the Lateral Umbilical Ligament. All fatty layers are removed meticulously to expose Cooper's Ligament, the Inferior Epigastric Vessels and the Spermatic Cord.

The indirect inguinal hernia sac is dissected carefully from the Spermatic cord. In that case, the distal portion of the indirect sac was not dissected and left attached to the spermatic cord.

The 3D Max Mesh is rolled like a cigarette and insert via 10mm trocar into the intra-abdominal cavity. This is a « three dimensional Mesh » that is custom constructed to deploy and mould the afflicted inguinal region. This Mesh is unilateral (for left or right side repair) and comes in different sizes, so can be adapted to each patient. The external side of the Mesh is represented by the most acute angle, this landmark allows us to position it in the right way.

Despite the fact that fixation of that 3D mesh is not routinely advised, we still prefer in all patients to secure the mesh with helicoidal tacks. However to avoid post-operative neuropathies, tacks are never placed lateral to the epigastric vessels.

The peritoneum is closed meticulously with monocryl 2/0 running suture. The hernia sac is also closed because no defect between the peritoneum and the abdominal wall should be left open.