SURGIMESH® XB in Ventral Hernia Repair

CASE REPORT - 75 DAY RE-LOOK

BACKGROUND

A 54 year old female patient had a ventral hernia repaired laparoscopically at a major military medical institution in June of 2009. Following adhesiolysis and delineation of the ventral defect (see Figure 1), a 15 cm circle of SURGIMESH XB hernia mesh was laparoscopically placed and secured using four permanent transfascial sutures and permanent titanium tacks (see Figure 2). The patient had an uneventful recovery and was subsequently scheduled for the laparoscopic gastric bypass approximately two months out.

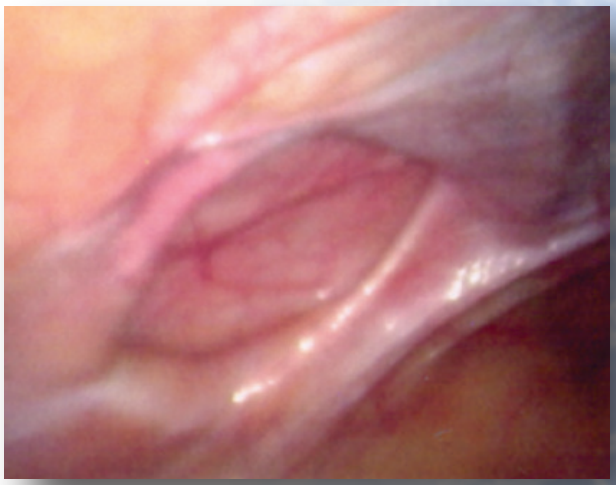

Figure 1
photo courtesy K. Mann, MD

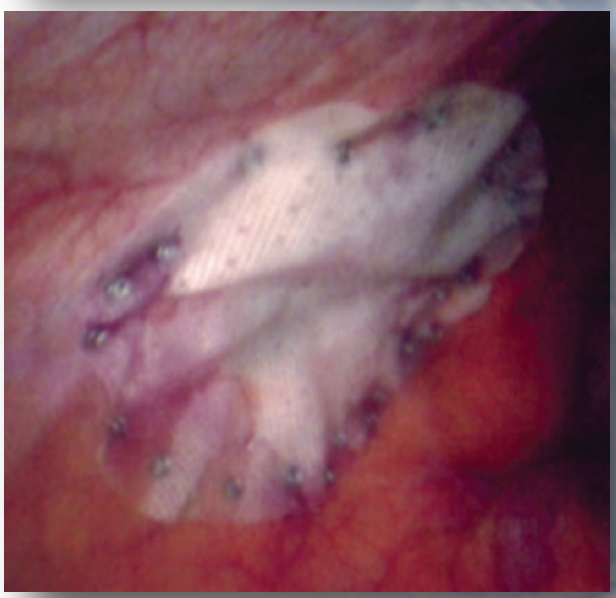

Figure 2
photo courtesy K. Mann, MD

RE-LOOK PROCEDURE

75 days post-operatively the patient under-went a laparoscopic gastric bypass procedure. During the procedure intra abdominal images of the incorporated 15 cm circular SURGIMESH XB hernia mesh were captured. (see Figure 3) The hernia repair was intact with no patient complaints of discomfort,

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stiffness, bulging or pain. The visceral surface of the SURGIMESH material was adhesion free with a single fold which was felt to have occurred following desufflation in the original procedure. Isolated areas of resolving granulation tissue, not associated with any adhesion formation, were seen on the visceral surface. Firm healing of the edge of the SURGIMESH XB hernia mesh to the peritoneal surface of the abdominal wall was evident.

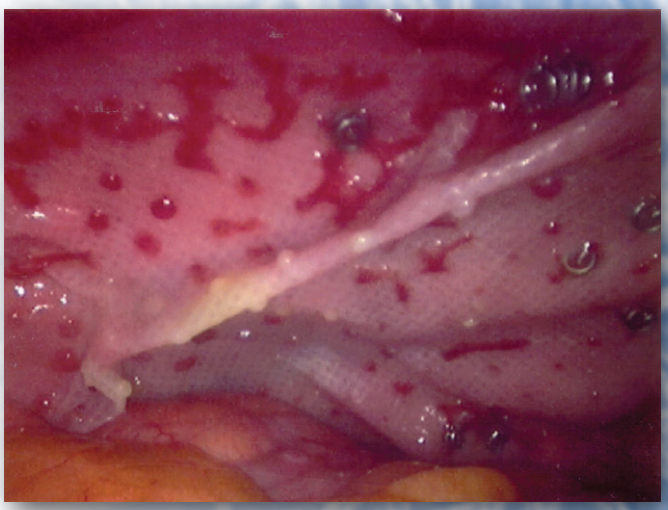

Figure 3 - photo courtesy K. Mann, MD

FOLLOW-UP

Following the laparoscopic gastric bypass the patient continued to do well and recovered uneventfully. The abdominal wall defect remains intact with no discomfort, stiffness or pain 18 months post operatively.

NON - WOVEN MESH TECHNOLOGY

SURGIMESH is a lighter-weight, non-woven, microfiber polypropylene mesh which is FDA cleared for the repair of all types of hernias (WN non-barrier & XB barrier meshes). It is thin (nominally 0.5 mm), strong and very flexible providing superior handling during surgery and comfortable repairs for patient's long term [3, 4]. Clinical retrievals and experimental evaluations have demonstrated SURGIMESH non-woven mesh to incorporate quickly and completely (< 2 weeks) producing 100% complete vascularized fibrous connective tissue incorporation[1] (see figure 4). Achieving complete vascularized tissue incorporation helps integrate the non-woven mesh intimately into the surrounding tissues and can protect it in the event of microbial challenge.With a permanent silicone barrier, SURGIMESH XB consistently prevents adhesion formation long term as demonstrated in this case report and in the medical literature [2].

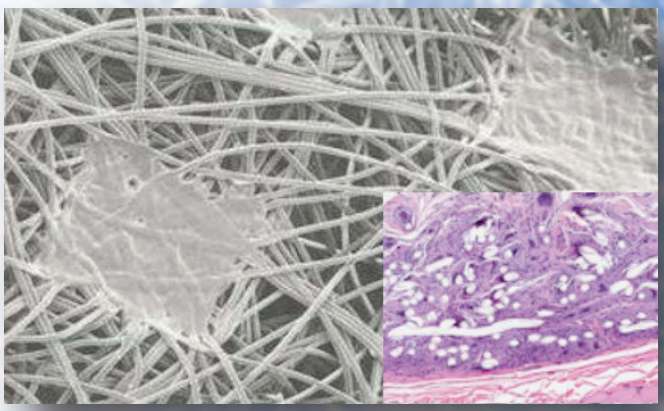

Figure 4 - Non-woven XB Mesh structure @ 50x with inset showing complete fibrous tissue incorporation at 180 days (40x).

References:

1) Hagendorn, E., et.al, Influence of Structure on Surgical Mesh Healing in Soft Tissues, Flagship Bioscience Analysis, Oct. 14.
2) Harris, ES, Analysis of the kinetics of peritoneal adhesion formation in the rat and evaluation of potential anti-adhesive agents, Surg, vol. 117, p. 663, Jun 1995
3) Smietanski, M., et. al., Five-year results of a randomized controlled multi-centre study comparing heavy-weight knitted versus low-weight, non-woven polypropylene implants in Lichtenstein hernioplasty, Hernia, v. 15, p. 495, Oct 11
4) Yunis, J, Safety and Efficacy of Non-Woven PP with Silicone Barrier in LVHR, ACOS Annual ACA, Sep. 11