RISK FACTORS FOR WOUND MORBIDITY AFTER OPEN RETROMUSCULAR (SUBLAY) HERNIA REPAIR

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The purpose of the study was to assess wound morbidity and the associated risk factors in the setting of Retro-Rectal hernia repair. A prospective study was carried out on consecutive RR hernias with a 90 day minimum follow up. The primary outcome measures were the incidence of surgical-site occurrence (SSO) and surgical-site infection (SSI).

The study included 306 patients. 84 SSO’s were identified in 72 patients, 23.5%, and these occurrences included surgical site infections (SSI’s) in 15.7%, wound cellulitis in 4.6%, skin dehiscences in 3.9%, seromas in 2% and haematomas in 1.3%. There were no instances of mesh excision or fistula formation. Various treatment measures included percutaneous drainage, and 10 patients required return to the operating theatre for debridement. Wound occurrences had a greater incidence in patients with Diabetes mellitus, a hernia width of more than 20cm and the use of biologic mesh. The authors indicated in their conclusion that biologic mesh was an independent predictor of wound morbidity. A comparison with figures available on wound morbidity in other forms of mesh hernia repair suggested that the retromuscular (Sublay) mesh position may be more advantageous.

There is increasing evidence to suggest that the Sublay positioning of mesh be regarded as the “gold standard” for incisional hernia repair. The history of this technique was described, originally developed by the French surgeons, Rives and Stoppa in the 1970's. The authors describe the transversus abdominus muscle release (TAR), the purpose of which is to create a space for the Sublay mesh placement, and to allow subsequent medialisation of the rectus abdominus muscle without compromising the neurovascular integrity of the abdominal wall. This technique is beneficial in particularly large hernias, allowing approximation of the muscle layer, with a mesh placed in the retromuscular position. The authors make a strong statement in their conclusion for the retro-rectal mesh techniques, and in the larger hernias, for a additional myofascial release to allow approximation in the midline of the rectus sheath.

Dr Currer’s comments:

The majority of abdominal wall hernias may be satisfactorily repaired by placing a mesh retro-rectus in the preperitoneal space, sutured full thickness through the anterior abdominal wall muscle and rectus sheath, tension-free, utilising a polypropylene-based mesh.