increased risk.² Our use of tapes provides a readily available, broad surface area, tension relieving device that reduces the 'cheese wire' effect on tissues. We would recommend our technique's consideration in difficult abdominal closure cases, particularly where there is concern over fragility of tissues and laparostomy is not an option. Given the poor quality of connective tissues in these patients, incisional hernia can be considered an acceptable sequela. We have successfully used this technique on a patient with Ehlers–Danlos syndrome who had undergone multiple emergency laparotomies with wound dehiscences.

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Repair of giant abdominal incisional hernia: our technique

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BACKGROUND

Repair of a giant abdominal incisional hernia (Fig 1) is challenging. Various surgical techniques with varying success have evolved over the years without a defined technical superiority of one over the other.¹ We describe our approach to these demanding cases through a combined sandwich sublay synthetic mesh placement and component separation technique.

TECHNIQUE

Marker pen is used to address the redundant skin/old scar, followed by an elliptical incision. Careful dissection removes the redundant skin and preserves the hernial sac with the underlying bowel. Lateral skin flaps are created bilaterally up to the anterior axillary lines, exposing the rectus sheath and external oblique musculature along the length

Figure 1 Abdominal incisional hernia site of incision: (a) medial border of the rectus sheath; (b) 1 cm lateral to the rectus sheath

Figure 2 Skin, rectus sheath and external oblique muscle flaps created bilaterally: (a) incision performed exposing the rectus abdominis muscles; (b) incision performed 1 cm lateral to the rectus sheath

Figure 3 Closure of abdomen and placement of mesh on the posterior rectus sheath

of the defect (Fig 2).^{2,3} Both recti are opened at the medial border, exposing the rectus abdominis muscles, which are dissected off the posterior sheath. The hernial sac is replaced intra-abdominally and an appropriate large synthetic mesh is placed on the posterior sheath and fixed with continuous 2/0 polypropylene stitches (Fig 3). To allow a tension free midline, closure of the anterior sheath, bilateral incision and mobilisation is performed 1 cm lateral to the rectus sheath on the external oblique musculature craniocaudally from the costal margin to the inguinal ligament (Fig 2).² Anterior sheath closure is obtained with continuous No. 1 polydioxanone. Four drains are placed in the subcutaneous layer. The skin is closed with an absorbable suture.

DISCUSSION

Our approach using combined sandwich sublay mesh placement and the component separation technique for the repair of giant incisional hernias has shown promising results with a very low morbidity rate.

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