P045  MEDIALIZATION AFTER COMBINED ANTERIOR AND POSTERIOR COMPONENT SEPARATION IN GIANT INCISIONAL HERNIA SURGERY, AN ANATOMICAL STUDY

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Aim: To obtain tension-free closure for giant incisional hernia repair, anterior or posterior component separation (ACS, PCS) is often performed. In extreme patients, ACS and PCS may be combined. The aim of this study was to assess the additional medialization after simultaneous ACS and PCS.

Material and Methods: Fresh-frozen post mortem human specimens were used. Both sides of the abdominal wall were subjected to retrorectus dissection (Rives-Stoppa), ACS and PCS, the order in which the component separation techniques (CST) were performed was reversed for the contralateral side. Medialization was measured at three reference points.

Results: ACS provided most medialization for the anterior rectus sheath, PCS provided most medialization for the posterior rectus sheath. After combined CST total median medialization ranged between 5.8 and 9.2 cm for the anterior rectus sheath, and between 10.1 and 14.2 cm for the posterior rectus sheath (depending on the level on the abdomen). For the anterior rectus sheath, additional PCS after ACS provided 15% to 16%, and additional ACS after PCS provided 32% to 38% of the total medialization after combined CST. For the posterior rectus sheath, additional PCS after ACS provided 50% to 59%, and additional ACS after PCS provided 11% to 17% of the total medialization after combined CST. Retro-rectus dissection alone contributed up to 41% of maximum obtainable medialization.

Conclusions: ACS provided most medialization of the anterior rectus sheath and PCS provided most medialization of the posterior rectus sheath. Combined CST provides marginal additional medialization, clinical use of this technique should be carefully balanced against additional risks.