

Single port laparoscopic repair of primary and incisional ventral hernia

Re: Single port laparoscopic repair of incarcerated ventral hernia, MacDonald et al. (2009) *Hernia*, March 24 (Epub ahead of print)

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Dear Editor,

We read with interest the letter by MacDonald et al. [1] reporting a case of single port laparoscopic repair of ventral hernia and referring to the paper by Shah et al. [2], who have reviewed their large experience on the laparoscopic repair of ventral hernias. These papers deserve comments regarding the potential of the development of single port laparoscopic repair of ventral hernias.

We first want to congratulate MacDonald et al. for their first report of a single port laparoscopic repair of a ventral hernia case. As with MacDonald et al. [1], we have started to approach primary and incisional ventral hernia through a single port technique with excellent short- and long-term results [3].

We have now completed 11 cases of ventral hernia (six umbilical and linea alba, five incisional hernias) repair through single port access (SPA) laparoscopy with intra-peritoneal composite mesh placement. A single 12-mm port was positioned through an open approach midway between the anterior superior iliac spine and the costal margin on left or right flank. To conduct SPA ventral hernia repair, a working channel endoscope (Richard Wolf GmbH) was used with a standard straight 5-mm instrument. The section of adhesions, freeing the hernia contents, dissection of falciform ligament and urachal structure, when needed,

were achieved similarly to the current technique of multi-port laparoscopic ventral hernia repair. In all cases, hernia repair was achieved by the placement of a composite mesh (Proceed™ surgical mesh, Johnson & Johnson) with at least 5-cm coverage of the normal abdominal wall all around the defect. Meshes were fixed at least with four sutures and multiple absorbable tacks (AbsorbaTack™, Covidien). The fascial incision at the port site were closed with 2/0 Maxon under vision. The median operative time was 58 min (range 45–78). There were no intra- or post-operative complications. No recurrences were observed until now with a median follow-up of 8 months (3–13).

While multiport laparoscopic repair of ventral hernia has been shown to offer excellent results, the rationale for single port laparoscopic repair of ventral hernia may exist. It is associated with excellent or better cosmetic results, but, more importantly, it implicates only a single incision, while being easily feasible for laparoscopic surgeons routinely performing laparoscopic ventral hernia repair, as it only reproduces the standard laparoscopic technique. The single port insertion using an open cut leaves only a single fascial wound, which may reduce the risk of incisional hernia on the port, especially in patients which have proved to be prone to abdominal wall hernias [4, 5].

In conclusion, we agree that the laparoscopic repair of ventral and incisional hernias are feasible, safe and may result in excellent short- and long-term results. But we agree with MacDonald et al. that it may also be performed using a single port and a single incision (12 mm). The single port approach results in less scarring and may decrease the risk of incisional hernia on the port incision in patients which are at risk of abdominal wall hernias. Single port laparoscopic mesh repair of ventral hernias has been safe and effective in the present series, and may, in future, be the routine of choice for ventral hernia treatment.

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