

# Laparoscopic Repair of a Ventral and Incisional Hernia (LRVIH) via Endoscopic Dome Surgery by Sitting Position (EDSS)

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**Abstract :** A ventral and incisional hernia is one of the serious complications. Recently, underlay mesh repair using a laparoscope is frequently performed. As a result, a new surgical position for LRVIH has thus been devised. **Methods :** The subjects are comprised of 15 patients with a primary or recurrent hernia who underwent LRVIH during the period of 2006 to 2008. In EDSS, the surgeon, the assistant and the laparoscope operator sit on chairs, and the surgical table and the monitor are placed so as to obtain good hand-eye coordination. **Results :** The mean Body Mass Index was 25.2. Bi-layered expanded polytetrafluoroethylene (ePTFE, Bard®) mesh was used in all of the 15 subjects. The largest size of the hernia orifice was 282.7 cm<sup>2</sup> and average was 51.8 cm<sup>2</sup>. No recurrence of hernia was observed, but seroma occurred in 4 patients. Most patients complained of an abdominal pain after the surgery and they are administered of some analgesics for at least 5 days in 10 subjects (66.7%) and oral analgesics (NSAIDs). In LRVIH, the most procedures should be done at the ceiling of the pneumonized abdominal cavity. Thus EDSS is suitable to keep hand-eye coordination, which is important in endoscopic surgery. When sitting on a chair, the surgeon could easily handle surgical forceps and scissors. This surgical position seems to be highly ergonomic and relieve our mental and physical fatigue. **Conclusions :** The outcome of surgery for LRVIH is good, and EDSS can be performed both comfortably and safely, while inducing less fatigue for the physicians.

**Key words :** Incisional Hernia, Laparoscopic Repair, Hand-Eye Coordination