

Pure transvaginal umbilical hernia repair

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Abstract

Background Transvaginal natural orifice transluminal endoscopic surgery (NOTES) procedures are at the forefront of minimally invasive innovation, remarkable for shorter recovery times and decreased postoperative pain [1, 2]. Most transvaginal procedures are performed as hybrid procedures [3]. To our knowledge, this is the first video depiction of a pure transvaginal umbilical hernia repair in a human.

Methods This is a 38-year-old woman, body mass index 36.4 kg/m², with a symptomatic port site hernia in the umbilical region after a previous laparoscopic cholecystectomy. The patient was positioned in stirrups in a steep Trendelenburg position. Sterilization of vaginal cavity was performed with 10 % povidone-iodine solution. A 2 cm transverse incision at the posterior fornix was made, and a SILS port (Covidien, North Haven, CT) was introduced. One

12 mm trocar and two 5 mm trocars were placed through SILS port. Standard straight laparoscopic instruments were used. A 12 cm round Parietex mesh (Covidien) was placed in a specimen retrieval bag and deployed into the peritoneal cavity. The mesh was extracted, unfolded in the abdominal cavity, and circumferentially fixated to the abdominal wall with an AbsorbaTack device (Covidien). The colpotomy incision was closed with a running absorbable suture.

Results The procedure lasted 103 min and was performed on an outpatient basis. No intraoperative complications occurred. The patient was doing well and had no pain or recurrence at 2, 6, and 9 months' follow-up.

Conclusions Our initial experience with transvaginal ventral hernia repair in humans suggests that this procedure is feasible and safe. This approach may improve cosmesis and decrease the risk of future ventral hernias. Potential cons may include a longer operative time, mesh infection, and risk of visceral injury with a pure transvaginal approach. As transvaginal surgery evolves, techniques and devices will become increasingly refined to tackle these challenges.

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