

Outcomes of minimally invasive versus open abdominal hysterectomy in patients with gestational trophoblastic diseases

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Abstract:

Objective. The aim of this study is to compare surgical and oncologic outcomes for women undergoing minimally invasive hysterectomy (MIH) or open abdominal hysterectomy (OAH) for management of gestational trophoblastic disease (GTD).

Methods. Patients who underwent hysterectomy for GTD between January 1, 2009 and December 31, 2018 were identified using an institutional database and tumor registry. Patients were stratified based on indication for and mode of hysterectomy.

Results. 39 patients underwent hysterectomy for GTD – 22 MIH and 17 OAH. 26 hysterectomies (66.7%) were performed for primary treatment of GTD, 7 (17.9%) for chemoresistance, 2 (5.1%) for uterine hemorrhage, and 4 (10.3%) for other indications. Mean tumor size (4.2 vs 4.6 cm; $p = .81$) and operative time (136 vs 163 mins; $p = .42$) were similar in both groups. MIH was associated with significantly less blood loss (71.5 vs 427.3 ml; $p = .03$) and shorter hospital stay (1.5 vs 3.9 days, $p = .02$) than OAH. Postoperative histology comprised 12 complete moles (6 invasive), 8 choriocarcinomas, 9 placental site trophoblastic tumors and 9 epithelioid trophoblastic tumors. Median follow-up was 67.2 months (50.2 MIH, 79.3 OAH; range 11.1–131.2) and there was no difference in remission (81.8% MIH vs 76.5% OAH; $p = .68$). There were 7 recurrences (4 MIH, 3 OAH) and 3 deaths (2 MIH, 1 OAH). Overall survival was 97.3% at 2 years and 88.5% at 5 years. There was no significant difference in 5-year survival by mode of surgery (MIH 90.9%, OAH 83.3%; $p = .40$).

Conclusions. Patients undergoing MIH at our centers have similar oncologic outcomes, lower surgical blood loss and shorter hospital stay compared to those undergoing OAH. Overall survival is similar regardless of mode of surgery.