Planned robotic-assisted interval hysterectomy for the management of placenta accreta spectrum
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Topic: Other (Surgical management of placenta accreta spectrum)

Objectives
We examined whether planned robotic-assisted delayed interval hysterectomy (IH) after placenta left in situ (PIS) at time of cesarean altered morbidity compared to immediate cesarean hysterectomy (CH) for the management of placenta accreta spectrum (PAS).

Methods
This was a retrospective cohort study of all patients diagnosed antepartum with PAS at our institution between 1/1/2021 and 1/31/2023. Patients were counseled and chose to proceed either with CH or IH. In the IH group, operative and postoperative complications were summed and compared to CH, to reflect the addition of a second surgical event. Descriptive statistics were used to analyze differences. Continuous variables were compared using t-test or Wilcoxon rank sum test; categorical variables were compared using chi-square test or Fisher’s exact test. A p-value < 0.05 was considered statistically significant.

Results
Among 31 patients, 17 had CH and 14, IH. Two additional patients successfully accomplished uterine preservation with PIS and were not included in this analysis. There were no demographic differences. Median time from cesarean to IH was 35.5 days. Among patients with PIS, 57% had bleeding, 36% cramping/pain, 21% infection and 14% hospitalization. There were no statistical differences in complications between CH and IH, but 3 significant single events occurred in the IH group: one cardiac arrest at time of IH anesthesia induction and two cases of severe bleeding and sepsis with PIS at 4 and 7 days postpartum. All others (11/14) underwent a robotic-assisted IH. IH resulted in longer combined hospital stays and operating times. IH had less combined blood loss (1375 vs 3000mL, p=0.014), but there was no difference in the total amount transfused (3 vs 4 units packed red blood cells). Of note, 5 patients diagnosed with placenta percreta antepartum underwent IH, and all had an accreta or increta at the time of IH based on pathological analysis.

Conclusions
Planned robotic-assisted IH is an option for patients diagnosed with PAS antepartum. However, planned IH with PIS is associated with significant potential complications (bleeding, pain, infection), and patients should be thoroughly counseled. IH was associated with increased length of stay and operating time, reflective of the second surgery. Although the median blood loss was less, IH patients received comparable amounts of blood transfusion. However, for patients diagnosed with placenta percreta, all had resolved by time of IH, which may have allowed for a less radical hysterectomy.