Obstetrics & Gynecology:
February 2011 - Volume 117 - Issue 2, Part 1 - pp 307-316
doi: 10.1097/AOG.0b013e3182051519
Original Research

Uterine Evacuation for Second-Trimester Fetal Death and Maternal Morbidity

Edlow, Andrea G. MD, MSc; Hou, Melody Y. MD, MPH; Maurer, Rie MA; Benson, Carol MD; Delli-Bovi, Laurent MD; Goldberg, Alisa B. MD, MPH

Abstract

OBJECTIVE: To estimate maternal morbidity associated with uterine evacuation for second-trimester fetal demise compared with that associated with induced second-trimester abortion.

METHODS: This retrospective cohort study compared the maternal outcomes of two cohorts: 1) women diagnosed with fetal demise between 14 and 24 weeks who subsequently underwent dilation and evacuation or induction of labor; and 2) women undergoing induced abortion between 14 and 24 weeks by either dilation and evacuation or induction of labor. The primary outcome was major maternal morbidity. Assuming morbidity rates of 11% for fetal demise and 1% for induced second-trimester abortion, 94 patients were needed per group to detect significant difference in maternal morbidity (80% power, 5% alpha).

RESULTS: We identified 121 women with fetal demise and 121 women who underwent induced abortion for inclusion. There were no maternal deaths. In crude and adjusted analyses, treatment for fetal demise was not associated with increased maternal morbidity (25 of 121) compared with induced abortion (27 of 121) (adjusted odds ratio [OR], 1.15; 95% confidence interval [CI], 0.57–2.32). There were more blood transfusions in the fetal demise group (N=7) compared with the induced-abortion group (N=1) (*P*=.07). Induction of labor was more morbid than dilation and evacuation after adjusting for confounders (OR 5.36; 95% CI 2.46–11.69), primarily as a result of increased odds of infection requiring intravenous antibiotics. Gestational age of 20 weeks or greater was significantly associated with maternal morbidity (OR 2.59; 95% CI 1.39–4.84).

CONCLUSION: In the second trimester, uterine evacuation for fetal demise was not significantly associated with maternal morbidity compared with induced abortion. Induction of labor was more morbid than dilation and evacuation as a result of an increased risk of presumed infection.

LEVEL OF EVIDENCE: II