

Conclusions: This is the first survey to our knowledge to collect data on a home abortion provider network in North America. Participants and the people accessing their services represented a wide geographic range, and home abortion providers reported providing individualized and comprehensive abortion care in safe and effective ways. Home abortion providers are providing important routes of access to abortion across North America, and collaboration with clinical abortion advocates could strengthen these critical safety nets.

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Using placental proteins in urine and serum to assess gestational age: A new purpose for an old idea

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Introduction: Clinicians commonly use ultrasound or pelvic exam to confirm that the duration of a pregnancy is below the accepted limit of 70 days before providing medical abortion. These methods are expensive and invasive, and they require an in-person visit to a facility with trained personnel and requisite equipment. A blood or urine test for estimation of gestational age (GA) would be highly beneficial, particularly in low resource settings or when providing abortion care remotely through telemedicine. In this exploratory study, we aimed to determine whether selected placental proteins could serve as the basis of such a test.

Method: We collected blood and urine samples from 245 healthy pregnant women presenting for abortion services or prenatal care across the gestational age spectrum, oversampling between 5-15 weeks. We assayed each serum specimen for seven different placental proteins and urine samples for two. We also tested urine specimens for hCG using commercially available point-of-care pregnancy tests with sensitivities from 25 to 10,000 mIU/ml. We examined the data to determine whether we could identify serum or urine concentrations that would reliably rule out late pregnancies.

Results: Serum concentrations of some proteins rose continuously over pregnancy. For two compounds, we noted a clear concentration threshold that distinguished pregnancies of >70 days from earlier gestations. Similarly, we noted concentration thresholds for two other compounds that identified most pregnancies with GAs of >104 days. None of the urine pregnancy tests differentiated women with GAs above or below 70 days.

Conclusions: Two compounds tested showed promise as serum markers to identify pregnancies \leq 70 days gestation. If these results are validated by further research, these markers, alone or in combination with other markers, could be the basis of a test that could enhance access to abortion by screening out advanced gestations. Point of care urine hCG tests do not appear to be useful indicators of gestational age.

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Intrafetal Injection of Lidocaine to Induce Fetal Demise

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Introduction: We perform transvaginal intrafetal injections at the time of dilator insertion to reduce the need for transabdominal intracardiac injections. We sought to examine the efficacy of transvaginal intrafetal lidocaine compared to transabdominal intracardiac lidocaine to achieve fetal demise.

Method: We reviewed all charts at the DuPont Clinic in Washington, DC, from June 2017 through August 2018. We recorded relevant patient characteristics, clinical data, and outcome data. Ethical approval was obtained by the Stanford IRB. We performed transabdominal intracardiac injection with a 15-cm 20-gauge echotip needle under ultrasound guidance. We performed transvaginal intrafetal lidocaine injection after placement of the paracervical block for osmotic dilator insertion, using a 3.5-inch 20-gauge needle under ultrasound guidance. If unsuccessful, we performed a transabdominal injection, typically 30-60 minutes later.

Results: We performed injections for 114 fetuses in 112 patients. In all but 4 injections, we used 20-24 mL of lidocaine. Transabdominal intracardiac injections were effective in 75 of 75 cases (100%). Transvaginal intrafetal injections were effective in 38 of 62 cases (61%), with an efficacy rate of 82% and 57% for gestations at 22-23 weeks and at 24 weeks or more, respectively. For intrafetal injections, the average time to demise was 21 minutes, with a range from 0 to 40 minutes. Unsuccessful transvaginal intrafetal injections at 23 weeks or more were followed by successful transabdominal intracardiac injections in all cases (N=23). Of all 112 patients, one patient reported transient mild tinnitus after a transvaginal injection, and we observed no other adverse events.

Conclusion: Transabdominal intracardiac lidocaine injection is an effective method to achieve fetal demise with no adverse events observed. Transvaginal injection is a feasible method and can decrease the need for transabdominal injections. Further research is needed to define the efficacy of injections by gestational age and by injection location.

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Partisanship, Anecdotes, and Evidence in State Legislators' Policymaking on Abortion

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Introduction: Implicit in policy-relevant abortion research is the assumption that findings will influence policy outcomes. Yet many states continue to pass abortion restrictions in contravention of evidence. This raises questions about whether and how state lawmakers use evidence when deciding abortion policy, including how lawmakers balance evidence with other factors such as anecdotes, values, and politics. This study explores these issues through a qualitative study of legislators in three U.S. states.

Method: We conducted in-depth semi-structured interviews with state legislators and their aides in Maryland, North Carolina, and Virginia. We recruited members from all health-related committees