Does prior uterine scarring increase the likelihood of intervention among women undergoing medication abortion?

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Background
- Medication abortion (MAB) is growing in popularity as a way to safely terminate early pregnancy.
  - Early MAB now accounts for 23% of all abortions in the US, up from 6% in 2001.
- While the overall efficacy of MAB is 95%, its efficacy in women with a uterine scar may be lower due to abnormal implantation.
  - Important consideration as one-third of US births are delivered by cesarean section.
- Association between uterine scarring and success of MAB has not been studied with the current US dosing regimen.
- We sought to determine whether a history of uterine scarring, either from prior cesarean section or myomectomy, was associated with need for additional intervention after 200mg mifepristone/800mcg misoprostol.

Methods
- Data were abstracted from the charts of 2,054 patients at two Chicago clinics who underwent an MAB in 2011.
- Using multivariate logistic regression, we assessed the odds of failure after MAB.
- Failure defined as need for any intervention after the standard mifepristone/misoprostol regimen, including:
  - Additional misoprostol
  - Methergine
  - Uterine aspiration
  - Curettage
- Secondary outcome variable defined failure as need for aspiration or curettage.
- Controlled for age, race, smoking status, pregnancy history, and gestational age.

Results
- The odds of failure of MAB was not significantly increased among women with a history of scarring (see table and figure).
  - For any intervention: AOR 1.7, 95% CI 0.9-3.2.
  - For aspiration or curettage: AOR 1.8, 95% CI 0.7-4.6.
- No variables in our model were significantly associated with failure of MAB.

Conclusion
- While we did not find a significant association between uterine scarring and MAB, our findings do not rule out the possibility of a modest association.
  - Due to the high success rate of MAB, a much larger sample size would be needed for adequate power.
- Overall, our findings support the continued provision of this regimen to women with uterine scarring.
- Given the move to provide MAB beyond 9 weeks, future studies should examine this association in later gestations, where the risk for abnormal implantation due to scarring may be greater.