

Approximately 140,000 second trimester abortions are performed in the United States each year. Second trimester abortion is most commonly performed by a technique known as dilation and evacuation (D&E). Since the 1980s, many abortion providers have used digoxin, a cardiac medication, to cause fetal death before D&E by injecting digoxin into the fetus or amniotic fluid. Following the 2007 Supreme Court decision *Gonzales v. Carhart* upholding the Partial Birth Abortion Act of 2003, many physicians instituted routine use of digoxin before later second trimester abortion. *Gonzales v. Carhart* outlaws abortion procedures in which the physician intentionally removes a “living fetus” to or past the point of various anatomic landmarks. Causing fetal death prior to abortion is one means of ensuring compliance with the ban. Despite relatively widespread use, published data on the safety of digoxin in abortion care are limited. Our primary objective was to determine whether digoxin prior to D&E is associated with higher or lower rates of complications than D&E without digoxin. Our secondary objective was to determine the efficacy of digoxin to cause fetal death by gestational age and injection site.

We conducted a retrospective review of the medical records of two groups of patients at an urban family planning clinic. One group had received digoxin before their D&E procedures. The other group, from the 15 months prior to the initiation of routine digoxin use at the clinic, had undergone D&E without digoxin. We collected data on patient medical histories, their abortion procedures, and complications. We found no significant differences in background characteristics or pregnancy histories between the two groups. We found statistically significant differences in the occurrence of miscarriage and infection in the two groups, with the digoxin group showing higher rates of both complications. There were no significant differences in other complications. In addition, we found that digoxin achieved fetal death 92% of the time. Intrathoracic and intraabdominal injections were associated with the lowest rates of failure. We did not find an association between the efficacy of digoxin and gestational age.

We concluded that digoxin injection before D&E is associated with greater rates of spontaneous abortion and infection than D&E without digoxin.