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# Second trimester termination of pregnancy: a review by site and procedure type

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## Background

We hypothesized that complications for second trimester terminations are higher in a low-volume residency training program than in a high-volume private practice.

## Study Design

Complications and cost were compared between three groups undergoing second trimester terminations: patients undergoing dilation and evacuation (D&E) at a university hospital (Hospital D&E,  $n=83$ ) or medical pregnancy termination at a university hospital (Hospital Induction,  $n=89$ ) and D&E at a private outpatient facility (Clinic D&E,  $n=253$ ).

## Results

Major complications occurred in 11% of the Hospital D&E, 10% of the Hospital Induction, and 1% of the Clinic D&E patients ( $p=.0019$ ). Complication rates remained statistically significant when a logistic regression model was applied to the data. The mean total charge for the three respective groups was US\$4625, US\$5029 and US\$1105 ( $p<.001$ ).

## Conclusion



Second trimester terminations of pregnancy by D&E in well-selected patients in a dedicated outpatient facility can be safer and less expensive than hospital-based D&E or induction of labor.

## Keywords

[Second trimester abortion](#) • [Residency training](#) • [Complications of abortion](#) • [Cost for abortion](#)

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## References

1. Finer L.B. • Henshaw S.K.  
**Abortion incidence and services in the United States in 2000.**  
*Perspect Sex Reprod Health.* 2003; **35**: 6-15

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[Google Scholar](#)



am-Evans LD, Strauss LT, Herndon J, Parker WY, Whitehead S, Berg CJ. Abortion surveillance United States, 1999. MMWR Surveill Summ 2002;51:1 9



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3. Minino A.M. • Arias E. • Kochanek K.D. • Murphy S.L. • Smith B.L.

**Deaths: final data for 2000.**

*Natl Vital Stat Rep.* 2002; **50**: 1-119

[View in Article](#) ^

[Google Scholar](#)

4. Henshaw S.K. • Finer L.B.

**The accessibility of abortion services in the United States, 2001.**

*Perspect Sex Reprod Health.* 2003; **35**: 16-24



5. Eastwood K.L. • Kacmar J.E. • Steinauer J. • Weitzen S. • Boardman L.A.

**Abortion training in United States obstetrics and gynecology residency programs.**

*Obstet Gynecol.* 2006; **108**: 303-308

[View in Article](#) ^

[Google Scholar](#)

6. Grimes D.A. • Schulz K.F. • Cates Jr., W. • Tyler Jr., C.W.

**Mid-trimester abortion by dilatation and evacuation: a safe and practical alternative.**

*N Engl J Med.* 1977; **296**: 1141-1145

[View in Article](#) ^

[Google Scholar](#)

7. Hern W.M.

**Serial multiple laminaria and adjunctive urea in late outpatient dilatation and evacuation  
ortion.**



*Obstet Gynecol.* 1984; **63**: 543-549



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8. Wadhera S. • Millar W.J.

**Second trimester abortions: trends and medical complications.**

*Health Rep.* 1994; **6**: 441-454

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[Google Scholar](#)

9. Peterson W.F. • Berry F.N. • Grace M.R. • Gulbranson C.L.

**Second-trimester abortion by dilatation and evacuation: an analysis of 11,747 cases.**

*Obstet Gynecol.* 1983; **62**: 185-190



10. Jackson R.A. • Teplin V.L. • Drey E.A. • Thomas L.J. • Darney P.D.

**Digoxin to facilitate late second-trimester abortion: a randomized, masked, placebo-controlled trial.**

*Obstet Gynecol.* 2001; **97**: 471-476

[View in Article](#) ^

[Google Scholar](#)

11. Autry A.M. • Hayes E.C. • Jacobson G.F. • Kirby R.S.

**A comparison of medical induction and dilation and evacuation for second-trimester abortion.**

*Am J Obstet Gynecol.* 2002; **187**: 393-397

[View in Article](#) ^

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12. ... tman A.M. • Stubblefield P.G. • Schlam J.F. • Loberfeld R. • Osathanondh R.

**... dtrimester abortion with laminaria and vacuum evacuation on a teaching ... e. >**

*J Reprod Med.* 1985; **30**: 601-606

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[Google Scholar](#)

13. Glick E.

Surgical abortion. West-End Women's Medical Group, Reno (Nev)1998: 14-22

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[Google Scholar](#)

14. Grimes D.A.

**Second-trimester abortions in the United States.**

*Fam Plann Perspect.*,. 1984; **16**: 260-266



[Google Scholar](#)

15. Cates Jr, W. • Schulz K.F. • Grimes D.A. • Tyler Jr, C.W.

**The effect of delay and method choice on the risk of abortion morbidity.**

*Fam Plann Perspect.* 1977; **9**: 266-273

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[Google Scholar](#)

16. MacKay H.T. • Schulz K.F. • Grimes D.A.

**Safety of local versus general anesthesia for second-trimester dilatation and evacuation abortion.**

*Obstet Gynecol.* 1985; **66**: 661-665

[View in Article](#) ^

[Google Scholar](#)

17. Hakim-Elahi E. • Tovell H.M. • Burnhill M.S.



**Implications of first-trimester abortion: a report of 170,000 cases.**

*Obstet Gynecol.*,. 1990; **76**: 129-135



[View in Article](#) ^[Google Scholar](#)

18. Birkmeyer J.D. • Siewers A.E. • Finlayson E.V. • et al.  
**Hospital volume and surgical mortality in the United States.**  
*N Engl J Med.* 2002; **346**: 1128-1137

[View in Article](#) ^[Google Scholar](#)

19. Ramsey P.S. • Savage K. • Lincoln T. • Owen J.  
**Vaginal misoprostol versus concentrated oxytocin and vaginal PGE<sub>2</sub> for second-trimester labor induction.**  
*Obstet Gynecol.* 2004; **104**: 138-145



---

[Google Scholar](#)

20. Cowett A.A. • Golub R.M. • Grobman W.A.  
**Cost-effectiveness of dilation and evacuation versus the induction of labor for second-trimester pregnancy termination.**  
*Am J Obstet Gynecol.* 2006; **194**: 768-773

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