CLINICAL INQUIRIES

- From the Family Practice Inquiries Network

How long is expectant management safe in first-trimester miscarriage?

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EVIDENCE-BASED ANSWER

More than 80% of women with a first-trimester spontaneous abortion have complete natural passage of tissue within 2 to 6 weeks with no higher complication rate than that from surgical intervention (strength of recommendation [SOR]: **A**, based on multiple randomized controlled trials [RCTs] and cohort studies). Expectant management is successful within 2 to 6 weeks without increased complications in 80% to 90% of women with first-trimester incomplete spontaneous abortion and 65% to 75% of women with first-trimester missed

abortion or anembryonic gestation (presenting with spotting or bleeding and ultrasound evidence of fetal demise) (SOR: **B**, based on multiple cohort studies). There is no difference in short-term psychological outcomes between expectant and surgical management (SOR: **B**, based on RCT). Women experiencing spontaneous abortion with unstable vital signs, uncontrolled bleeding, or evidence of infection should be considered for surgical evacuation (SOR: **C**, expert opinion).

CLINICAL COMMENTARY

FPs should empathize, explain, and expedite

A spontaneous abortion can be a very distressing event for a woman and her family; and helping a patient through the complex medical and emotional issues that arise due to the miscarriage stretches the skills of a compassionate clinician. Fortunately, family physicians are ideally positioned to empathize with families, explain treatment options, and expedite medical procedures. This evidence summary gives clear information on outcomes that

physicians can share with their patients; however, most women quickly know what they want regarding retained products of conception. Adoption of a wait-and-see approach is common, but a substantial minority wants closure and presses for surgical therapy. Now both groups can be reassured that their choices are equally safe, and physicians can comfortably comply with their patients' wishes.

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■ Evidence summary

A systematic review of 18 studies, including 3 RCTs, compared outcomes for expectant management (545 women) vs surgical evacuation (1408 women) for first-trimester spontaneous abortion.¹ A successful first-trimester spontaneous abortion was defined

as vaginal bleeding for 3 weeks or less, fully expelled products of conception by 14 days, and no complications (infection, transfusion, uterine perforation, hospitalization, or death). Expectant management was successful in 93% overall, and 80% using only the data from RCTs.

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Completed abortions with expectant management by type ²				
TYPE OF	TOTAL	ABORTION COMPLETE BY		
ABORTION	PATIENTS	7 DAYS	14 DAYS	46 DAYS
Incomplete	221 (49%)	117 (53%)	185 (84%)	201 (91%)
Missed	138 (31%)	41 (30%)	81 (59%)	105 (76%)
Anembryonic	92 (20%)	23 (25%)	48 (52%)	61 (66%)
Total	451 (100%)	181 (40%)	314 (70%)	367 (81%)

An observational study evaluated 1096 consecutive patients with suspected firsttrimester abortion, classified by ultrasound as complete, incomplete, missed, or anembryonic.² In the latter 3 categories, patients chose expectant management (478) or immediate surgical evacuation (208). Those choosing expectant management were monitored weekly and offered surgical evacuation if their abortion was incomplete after 1 month (TABLE). Complications arose in 6 of 451 patients (1%) managed expectantly for up to 46 days, and in 5 of 208 patients (2%) managed surgically (not statistically significant). One patient in the expectant group had emergency surgery and blood transfusion.2

A smaller observational study evaluated 108 women with first-trimester missed abortions or anembryonic pregnancies who chose either expectant (85 women) or surgical management. They were followed with weekly ultrasound (including color Doppler imaging) and serum β -hCG for up to 1 month. Fifty-three (62%) completed a spontaneous abortion at 14 days and 71 (84%) at 28 days. There were no significant differences in the rate of complications.³

A prospective trial compared psychological morbidity for 86 women with ultrasound-confirmed first-trimester missed abortions, randomized to expectant or surgical management. At 2 weeks, a self-administered questionnaire about the experience of pregnancy loss found no significant difference in psychological reactions. No increase was seen in anxiety or depression symptoms between women who

had miscarried and healthy nonpregnant working women aged 19 to 39 years.⁴

Expert opinion recommends that women with spontaneous abortion beyond 13 weeks, a temperature >100.4° F, unstable blood pressure, uncontrolled vaginal bleeding, or evidence of endometritis or pelvic inflammatory disease should have surgical evacuation.²

Recommendations from others

UpToDate recommends expectant management for stable women who do not want any medical or surgical intervention, and are willing to wait for expulsion to occur. Surgical evacuation is recommended for women who are not stable because of bleeding or infection or for those who want immediate, definitive treatment of the nonviable pregnancy.⁵

REFERENCES

- Geyman JP, Oliver LM, Sullivan SD. Expectant, medical, or surgical treatment of spontaneous abortion in the first trimester of pregnancy? A pooled quantitative literature evaluation. J Am Board Fam Pract 1999; 12:55-64.
- Luise C, Jermy K, May C, Costello G, Collins WP, Bourne TH. Outcome of expectant management of spontaneous first trimester miscarriage: observational study. BMJ 2002; 324:873–875.
- Schwarzler P, Holden D, Neilsen S, Hahlin M, Sladkevicius P, Bourne TH. The conservative management of first trimester miscarriages and the use of colour Doppler sonography for patient selection. *Hum Reprod* 1999; 14:1341–1345.
- Nielsen S, Hahlin M, Moller A, Grandberg S. Bereavement, grieving and psychological morbidity after first trimester spontaneous abortion: comparing expectant management with surgical evacuation. *Human Reproduction* 1996; 8:1767–1770.
- Al-Fozan H, Tulandi T. Spontaneous abortion: management summary and recommendations. UpToDate [database]. Waltham, Mass: UpToDate; 2005.

FAST TRACK

Short-term psychological outcomes are similar between expectant and surgical management