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Comparing office and telephone follow-up after medical abortion☆,☆☆

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Abstract

Objectives: Compare proportion lost to follow-up, successful abortion, and staff effort in women who choose office or telephone-based follow-up evaluation for medical abortion at a teaching institution.

Study design: We performed a chart review of all medical abortions provided in the first three years of service provision. Women receiving mifepristone and misoprostol could choose office follow-up with an ultrasound evaluation one to two weeks after mifepristone or telephone follow-up with a scheduled telephone interview at one week post abortion and a second telephone call at four weeks to review the results of a home urine pregnancy test.

Results: Of the 176 medical abortion patients, 105 (59.7%) chose office follow-up and 71 (40.3%) chose telephone follow-up. Office evaluation patients had higher rates of completing all required follow-up compared to telephone follow-up patients (94.3% vs 84.5%, respectively, p = .04), but proportion lost to follow-up was similar in both groups (4.8% vs 5.6%, respectively, p = 1.0). Medical abortion efficacy was 94.0% and 92.5% in women who chose office and telephone follow-up, respectively. We detected two (1.2%) ongoing pregnancies, both in the office group. Staff rescheduled 15.0% of appointments in the office group. For the telephone follow-up cohort, staff made more than one phone call to 43.9% and 69.4% of women at one week and four weeks, respectively.

Conclusions: Proportion lost to follow-up is low in women who have the option of office or telephone follow-up after medical abortion. Women who choose telephone-based evaluation compared to office follow-up may require more staff effort for rescheduling of contact, but overall outcomes are similar.

Implications: Although women who choose telephone evaluation may require more rescheduling of contact as compared to office follow-up, having alternative follow-up options may decrease the proportion of women who are lost to follow-up.

Keywords: Medical abortion; Telephone follow-up; Mifepristone; Misoprostol

1. Introduction

The main purpose of follow-up after medical abortion is to detect ongoing pregnancies. Strategies for follow-up include office evaluation with ultrasonography and/or clinical examination, serum human chorionic gonadotropin (hCG) measurements, telephone assessment with urine pregnancy test (UPT), and self-assessment with UPT [1,2]. Both office evaluation and serum hCG measurements require the patient to present to a facility for assessment, which incurs additional costs, time and travel, and poses a risk of loss to follow-up [3,4]. Alternatively, telephone follow-up with a home UPT eliminates an in-person visit. Studies have evaluated regimens utilizing telephone evaluation and high-sensitivity UPT [5,6], low-sensitivity UPT [7,8], and semi-quantitative UPT [9,10], and all appear effective in detecting ongoing pregnancies. In the United States, the high-sensitivity UPT is commercially available and can be integrated into clinical practice. In one study of telephone assessment at one week and high-sensitivity UPT at 30 days after mifepristone over 97% of subjects completed follow-up, and this screening method detected all four ongoing pregnancies [5]. Furthermore, long acting reversible contraception uptake rates at one month post abortion do not differ by follow-up method [11]. Accordingly, we offer patients the option of office or telephone-based follow-up after medical abortion at our institution. The primary objective of this study is to compare proportion lost to follow-up after medical abortion in women

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who choose office versus telephone-based evaluation. Secondary objectives are to compare successful abortion rates between the follow-up methods and describe staff effort required to complete follow-up.

2. Materials and methods

We performed a chart review of women who had a medical abortion at the University of California, Davis Medical Center between August 2012 and August 2015. This time period represents the first three years of a new medical abortion program at this academic center. The University of California, Davis Institutional Review Board approved this study.

In our practice, women eligible for medical abortion received mifepristone 200 mg orally in the office. Patients had the option to administer misoprostol 800 mcg buccally 24–72 h after mifepristone or misoprostol 800 mcg vaginally 0–72 h after mifepristone. Women also had the choice to follow-up in the office or by telephone. Office follow-up consisted of an ultrasound examination one to two weeks after treatment. Telephone follow-up included a scheduled telephone interview one week after treatment with a standard set of questions and a second scheduled telephone call at four weeks after treatment to review the results of a home UPT [5]. An obstetrics and gynecology resident was primarily responsible for completing telephone assessments with supervision from family planning fellows and attending physicians. If the clinician or patient was unsure whether the pregnancy passed after the first telephone evaluation or if the patient reported a positive UPT at four weeks, then the clinician scheduled the patient for an office evaluation.

Two investigators (MJC and KR) extracted all data from patient charts identified from the mifepristone administration log. The primary outcome of the study is proportion lost to follow-up. Women in the office follow-up group were considered to have completed all follow-up if they attended an office visit. Women in the telephone group were considered to have completed all follow-up if they completed both telephone assessments at one and four weeks or if they attended an office visit for evaluation. Secondary outcomes include successful abortion, defined as passage of gestational sac without need for surgical intervention, and staff effort to complete follow up as measured by the number of missed office visits that required rescheduling in the office group and additional attempts required to complete telephone follow-up. For women with more than one abortion during the time period, we only included the first encounter. We also excluded women who planned serum hCG follow-up and women with pregnancies more than 63 days' gestation. Women who switched follow-up method after the initial consultation were kept in their originally chosen group for analysis. We used SPSS 22 (IBM, Armonk, NY, USA) to perform descriptive statistics and comparisons between groups with chi-square and Fisher's exact tests and considered a $p<.05$ as significant.

3. Results

Our clinic provided 191 medical abortions between August 2012 and August 2015. We excluded 12 repeat abortions, two abortions in women who had serum hCG follow-up, and one abortion at greater than 63 days' gestation. Subject characteristics were similar between those who chose office and telephone follow-up (Table 1).

More participants chose office follow-up (105, 59.7%) compared to telephone-based evaluation (71, 40.3%). Although women who chose office evaluation were more likely to complete all follow-up (94.3% vs 84.5%, $p=.04$), the proportion lost to follow-up was similar in both groups (4.8% vs 5.6%, $p=1.0$).

Some women switched groups after the initial office consultation. Figs. 1 and 2 depict subject follow-up flow in the office and telephone groups, respectively. In the office group, nine (8.6%) women switched to telephone-based follow-up, and two (2.8%) switched from telephone to office follow-up ($p=.20$). Of the 71 women in the telephone follow-up group, all 10 (14.1%) who were instructed to come into the office for evaluation complied. Two (1.9%) office group patients and four (5.6%) women in the telephone cohort visited the emergency room ($p=.18$); one of these visits in the office follow-up cohort occurred in a patient who experienced a sickle cell crisis five days after misoprostol use which required admission to the Intensive Care Unit.

Table 1
Characteristics of women receiving mifepristone and misoprostol for medical abortion based on chosen follow-up method*.

	Office Follow-up (n=105)	Telephone Follow-up (n=71)
Age (years)	29 (16–45)	29 (18–42)
Ethnicity		
Hispanic	20 (19.0)	14 (19.7)
Not Hispanic	75 (71.4)	48 (67.6)
Not specified	10 (9.5)	9 (12.7)
Race		
White	41 (39.0)	35 (49.3)
Black	14 (13.3)	6 (8.5)
Asian and Pacific Islander	25 (23.8)	8 (11.3)
Not specified	25 (23.8)	22 (31.0)
Private Insurance	91 (86.7)	65 (91.5)
Prior delivery	59 (56.2)	48 (67.6)
Prior abortion	34 (32.4)	24 (33.8)
Gestational age (days)		
≤49	59 (56.2)	44 (62.0)
50–56	30 (28.6)	16 (22.5)
57–63	16 (15.2)	11 (15.5)
Chose vaginal route of misoprostol	92 (87.6)	60 (84.5)

Data are presented as n (%) or median (range).
All p values are ≥ 0.05 for comparison of subject characteristics between the office and telephone cohorts.

* Women in both cohorts received mifepristone 200 mg and could choose route of misoprostol administration (buccal or vaginal) and method of follow-up; office follow-up required a visit in one to two weeks and telephone follow-up involved a telephone interview in one week and a telephone call to review results of a home urine pregnancy test in four weeks.