Outpatient Termination of Pregnancy: Experience in a Family Practice Residency

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At the University of Washington Family Medicine Clinic, termination of pregnancy procedures were performed on 260 patients. Their records were reviewed, and an analysis was completed on demographic data, technical procedure parameters, and complication rates during and following the procedure. The majority of patients were not primigravida. Fifteen percent were between six and eight weeks of gestation. Following the procedure, 3.8 percent had excessive bleeding, and 2.7 percent developed endometritis at rates comparable to those found in the obstetrics and gynecology literature. No known perforations occurred. Outpatient termination of pregnancy performed on selected patients in a family practice setting can be a procedure of low morbidity.

Since the Supreme Court decision in January 1973 legalizing abortion, elective termination of pregnancy using suction curettage has become a common outpatient procedure. Previously published studies have reported acceptably low morbidity and mortality for this procedure, actually less than the complication rate of carrying the pregnancy to term.[1] All of these studies have been done in obstetrics-gynecology based facilities or with obstetrician-gynecologists performing the procedure.

This paper reports experience with 260 elective terminations of pregnancy performed by residents and faculty in a university based family practice.

Methods

Between January 1972 and January 1981, 260 outpatient terminations of pregnancy were performed in the Family Medical Center (FMC) at the University of Washington. This site serves as the family practice clinic for the residency training program in family medicine of the University Hospital, with 18 residents and 12 full-time faculty seeing patients on a continuity basis.

All 260 patients were registered patients of the FMC. A patient who desires consultation for termination of pregnancy obtains a preprocedure appointment with her physician. At that time the pregnancy is documented by history, pregnancy

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testing, and physical examination. Patients with an estimate of gestational size greater than 12 weeks from the last menstrual period are referred to other facilities. Any patient with a serious underlying medical condition is also considered for referral.

All others are counseled as to the nature and risks of the procedure and alternatives to termination. The patient's attitudes and feelings about the termination are explored. If the physician and patient agree to proceed, laboratory tests—including blood type, hematocrit, gonorrhea culture, and Pap smear—are performed.

On the day of the procedure the patient's questions and feelings are reviewed. A standard consent form is completed. If the clinician elects to use laminaria, it is placed no earlier than 24 hours and no later than 8 hours prior to the procedure. Those physicians electing the use of prophylactic antibiotics use tetracycline or ampicillin for four days, beginning either the day prior to or the day of the termination.

The FMC outpatient surgical room is used for the procedure. Anesthetic options are local, paracervical block, and/or systemic analgesics. Under sterile conditions the uterus is sounded, the cervix is dilated, and a plastic cannula with suction is used to evacuate the uterus. A sharp currette may be used to confirm complete aspiration. The aspirated material is examined grossly for products of conception before being sent to pathology. Rh immune globulin (RhoGAM or MICRhoGAM) is given to Rh negative women, and positive gonorrhea cultures are treated appropriately. After being observed for approximately 30 minutes, the patient is given verbal and written instructions regarding bleeding, increasing pain, fever, and restrictions on tampon use and intercourse. A follow-up visit is made within one to two weeks, but the patient is instructed to call the clinic for physician consultation if questions or problems arise earlier. On the follow-up visit a pelvic examination is performed and contraception is discussed.

Each of the 260 clinical records was examined retrospectively. Each procedure was considered a separate case, even though certain women had more than one procedure. Suction curettage for diagnostic purposes, to complete a spontaneous abortion, or for fetal demise was excluded. Demographic data, medical information, procedure documentation, and follow-up were collected on a standard audit sheet.

Results

The mean age of the patients was 25 years, with a range of 15 to 40 years. The mean gravidity was three (range to gravida 10) and parity, one. Primigravidas accounted for 24 percent of the patients. Although 22 percent of the total FMC patients are covered by public assistance, 36 percent of the study patients were subsidized by that plan.

Gestational size was estimated by the physician on pelvic examination. Fifteen percent of the women were between 6 and 8 weeks, with a range from 3 to 12 weeks. Laminaria was used in 21 percent of the cases. Prophylactic antibiotics were prescribed to 44 percent in the series. The most common anesthesia used was a paracervical block, used alone 34 percent of the time or supplemented with diazepam (Valium) or narcotics in another 37 percent. Other methods of analgesia included Valium alone, narcotics, and hypnosis. No anesthesia was documented in 4 percent of the records.

Documentation of follow-up visits was noted in 89 percent of the procedures, with 84 percent occurring between one and four weeks postprocedure. Contraception elected postprocedure was 40 percent oral contraceptive, 24 percent diaphragm, 16 percent intrauterine device, and 10 percent none. Foam and condoms and permanent procedures accounted for the remainder. Of note is that 41 percent were using no contraception and 9 percent were using oral contraception before the procedure, the frequencies of use of other methods being similar to postprocedure frequencies.

Complications as recorded by the physician included the following: bleeding more than a normal menstrual period or requiring the added use of oxytocin, 3.8 percent; repeat dilation and curettage for presumed incomplete abortion (prolonged bleeding, enlarged uterus with or without pain and fever), 3.5 percent; pain in excess of expected during and after the procedure, 2.7 percent; endometritis documented by fever greater than 38 C, pain, and the institution of a full course of antibiotics, 1.9 percent.

Three patients were not pregnant at the time of the procedure. Two molar pregnancies were documented. No uterine perforations, cervical lacerations, or ectopic pregnancies were found in this series, nor were there any deaths associated with the procedure.

Table 1. Comparative Complication Rates (%)

Complication	Present Study (n=260)	Published Studies
Bleeding	3.8	0.2-5.0[1-5,7,10,11]
Incomplete	3.5	0.2-3.3[2-5,7,10,11]
Pain	2.7	7.4-12.3[6,7]
Infection	1.9	0.1-4.0[1,3,4,6,7,10,11]
Not pregnant	1.2	1.0-4.0[4,7,10,11]
Uterine perforation	0	0.02-0.7[3,7-9,11,12]
Cervical laceration	0	0.01-1.6[3,7-9,11,12]

No statistically significant correlations were found between any complication and gestational size, uterine position, use of prophylactic antibiotics, use of laminaria, performance of sharp curettage, or pathology reports, nor were any nonstatistically significant trends identified.

Discussion

Reported complications from this study and from other published studies are summarized in Table 1. The technique used in termination of pregnancy was similar in all reports.[2-8] The complication rates reported in this study fall within the range of other series cited in the literature. Difficulty in comparing results among studies arises because of variations in definitions used to assess complications. For example, bleeding as a complication was reported with a frequency of 0.2 percent to 5 percent. The lower value was from a study defining excessive bleeding only if transfusion was required.[7] In this study the 3.8 percent rate of bleeding greater than expected in normal menstrual period or requiring oxytocin falls within that range.

Incomplete abortion occurred in 3.5 percent of the cases. No correlation was found between incomplete abortions and gestational age, presence or absence of check with metal curette, or pathology results. The published frequency of incomplete abortion ranges from 0.2 percent to 3.3 percent. The criterion for this complication, the performance of a repeat dilatation and curettage for suspected retained products of conception whether or not the tissue was subsequently recovered, may be too strict and perhaps accounts for the relatively high frequency in this series.

Few studies reported pain as a complication. The assessment in this study was made by the physician, who reported 2.7 percent of patients experienced an unusual degree of pain. Moeller et al[7] reported "considerable discomfort" in 7.4 percent, and the Filshie and Sanders series[6] reported 12.3 percent of patients found the procedure painful or very painful. All were subjective assessments.

Infection rates varied form 0.1 percent to 4 percent. The definition of endometritis for this audit, temperature greater than 38 C with uterine pain and initiation of a full antibiotic course, resulted in a 1.9 percent frequency, well within the published range.

Comparison of reported total complication rates is not possible because of noncomparable definitions of complications. For example, one study with a total reported complication range of 0.4 percent considered only severe complications such as shock, sepsis, embolism, and the like.[9] No other study considered complications identical to those defined in this study. Wulff and Freiman did none of their own follow-up and reported a 1.5 percent total complication rate.[4] The follow-up rate of 89 percent for this study was exceptionally high. Comparison of published data shows a trend toward increased reported complication rate with increased follow-up, as would be predicted.[2,3,5,7,10,11]

Previously published studies have shown correlations between gestational size and complication rates.[4-6,10-12] In this study there were few patients with complications, and no significant correlations could be documented. The patient population was

selected to provide low risk patients, hence minimizing complications.

Of additional interest is contemplating the impact of the procedure on birth control measures. A change can be seen from the use of no contraception, that is, 41 percent did not use contraception before the procedure, whereas only 9 percent did not use contraception after. At the same time oral contraception use increased from 10 percent before the procedure to 40 percent after. A previous study demonstrated very similar results for contraception use both before and after the procedure.[2]

Conclusions

Outpatient termination of pregnancy by suction curettage on selected patients can be a safe procedure in a family practice residency clinic. Demographic data, descriptions of the procedure, and complication rates for this study are comparable with those of previously published studies. This is the first published series of such low morbidity reported outside specialty and referral centers and is all the more remarkable considering the great number of providers and the educational setting.

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