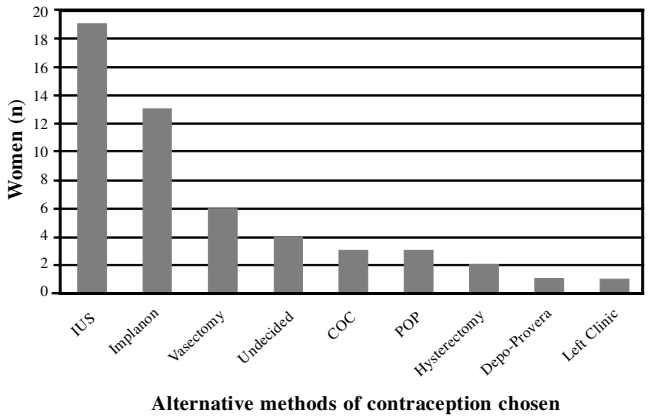

Figure 3 *Alternative methods of contraception chosen (n = 52). COC, combined oral contraceptive; IUS, intrauterine system; POP, progestogen-only pill.*

had undergone a vasectomy.[11] At 14 years post-sterilisation the cumulative probability of having a hysterectomy was 17%, with rates as high as 35% and 46% in women with endometriosis or prolonged menses at the time of the original surgery.[12] This leads us to conclude that health professionals working in primary and secondary care hold the key to improving women's health by providing careful and up-to-date information.

Our non-attendance rate during the study period was 32%. Studies report figures ranging from 5% to 34% for non-attendance at outpatient clinics.[13] The non-attendance rate is higher in deprived areas and the peak age range for hospital non-attenders is between 20 and 30 years. This is the age range of women commonly referred to our unit for sterilisation counselling so perhaps a high non-attendance rate is not surprising. However, we plan to try to reduce our non-attendance rate by altering the way we offer appointments for sterilisation counselling. Once we receive a GP referral for female sterilisation we will write to the woman asking her to telephone the clinic secretary to arrange her own appointment. Women will be able to choose a date and time convenient to themselves and if they have changed their mind about being sterilised they do not need to arrange an appointment at all.

We plan to re-audit the women who chose alternative methods of contraception in 12 and 24 months' time. We want to look at the continuation rate of the alternative methods and to discover whether any women have subsequently gone on to be sterilised after all.

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Mifepristone and misoprostol for medical termination of pregnancy: the effectiveness of a flexible regimen

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Abstract
Background. *Mifepristone, followed 48 hours later by administration of misoprostol, is a well-established regimen for medical termination of pregnancy (TOP). Although this regimen is effective, its inflexibility may limit its provision in an outpatient service.*
Objective. *To confirm that misoprostol administration is effective whether administered 24, 48 or 72 hours after oral mifepristone.*
Design. *Observational study of 234 consecutive women with pregnancies up to 83 days' gestational age in whom medical TOP was performed during the period December 2000–July 2001.*
Setting. *Women's Health Care Department, Royal Bolton Hospital, Bolton, UK.*
Results. *There was a high success rate for complete abortion in all groups whether mifepristone was administered 24, 48 or 72 hours prior to misoprostol.*
Conclusion. *This study suggests that a more flexible regimen of mifepristone/misoprostol administration for medical TOP is effective in routine clinical practice.*

Key message points

- **Mifepristone followed 48 hours later by administration of misoprostol is an effective regimen for medical termination of pregnancy but is inflexible.**
- **A regimen whereby misoprostol is given at varying times up to 72 hours after mifepristone appears to work well in a district general hospital setting, whilst being more convenient for patients and staff.**

Introduction

Mifepristone, followed 48 hours later by administration of misoprostol, is well established for medical termination of pregnancy (TOP).[1] Initially offered for pregnancies of up to 63 days' gestation,[1] medical TOP has since been used throughout the first trimester[2] and extended to second-trimester pregnancies.[3] We have found that the inflexibility of the standard regimen is inconvenient for patients and may be difficult to arrange on an outpatient basis.

A study by Schaff et al. demonstrated that when misoprostol was given either 24 or 72 hours after mifepristone it was as effective as the 48-hour regimen, whilst at the same time being more convenient for patients and staff.[4] This study only included gestations up to 56 days. A study by Creinin et al. showed a lower success rate when mifepristone and misoprostol were administered at the same time.[5] The aim of our study was to ascertain whether misoprostol was effective when administered 24, 48 or 72 hours after oral mifepristone for gestations up to 83 days.

Method

In the Women's Health Care Department at the Royal Bolton Hospital, medical TOP has been offered since 1992. The vast majority of terminations in our practice are performed medically and over 300 procedures are performed annually. The Women's Health Care outpatient department is open on Mondays to Fridays (0830–1700 hours) and has facilities to care for a maximum of three women per day undergoing this procedure.

Following referral, an ultrasound scan is performed on all women requesting TOP to confirm a viable intrauterine pregnancy and to ascertain the gestational age. After counselling, medical terminations of pregnancy are offered up to 83 days' gestation. A high vaginal swab and an endocervical swab for *Chlamydia trachomatis* are routinely taken and a discussion with the specialised nurses regarding future contraception is arranged. Rhesus-negative women receive anti-D immunoglobulin at the time of the misoprostol administration.

Mifepristone 200 mg orally was administered on the day of referral, or on a day that was convenient for the patient and the unit. The patient returned to the unit 24–72 hours following mifepristone administration. The women were informed that the success rates of administration of misoprostol either 24 or 72 hours later was not as well documented as that following a 48-hour interval.

On their return to the unit, and after nursing assessment to ascertain that abortion had not already occurred, the first dose of misoprostol 600 µg was administered at 0900 hours. Vaginal administration was encouraged although some women opted for oral therapy. A second dose of misoprostol 600 µg was routinely administered at 1300 hours if the patient had not aborted. Analgesia was available if required. For gestational ages up to 69 days, the patient was allowed home once vaginal bleeding has settled after abortion or at 1600 hours even if no products of conception had been passed. For pregnancies of 70–83 days' gestation, a third dose of misoprostol 400 µg was administered at 1700 hours if the patient had not aborted, and the facilities of our gynaecology ward within the Women's Health Care unit were used. If products of conception were recognised and were confirmed by histological examination, the termination was judged to have succeeded.

All patients were offered a review appointment after 7–10 days. If products of conception had not been passed in hospital, an ultrasound scan was arranged at the follow-up appointment to confirm that the pregnancy was not continuing. Women whose termination had not been confirmed and who did not attend were contacted and their general practitioners notified. An incomplete procedure was determined clinically if there was continuing heavy vaginal bleeding at the follow-up visit. Women were then offered a further dose of misoprostol or surgical evacuation of the uterus. Women who had a continuing pregnancy were offered a choice of a further medical procedure or a surgical TOP.

Contraception was commenced immediately after abortion for women who wished to commence the combined oral contraceptive or depot medroxyprogesterone acetate. An intrauterine device or Implanon was fitted at the review visit.

Vaginal infections were treated at the follow-up visit or, if the polymerase chain reaction test for *C. trachomatis* was positive, an immediate appointment for treatment and contact tracing was arranged at the on-site genitourinary medicine clinic.

Table 1 *Patient profile*

Age (years)	Patients (n)	Duration of gestation (days)	
		≥ 69	70–83
14–19	63	56	7
20–24	63	54	9
25–29	44	36	8
30–34	35	31	4
35–43	29	19	10

Table 2 *Comparison across the three patient groups*

	Time between mifepristone and misoprostol administration (hours)		
	24	48	72
All gestations	69	109	56
Complete abortion	65 (94.2%)	106 (97.2%)	55 (98.2%)
Incomplete abortion	1 (1.4%)	1 (0.9%)	1 (1.8%)
Continuing pregnancy	3 (4.3%)	2 (1.8%)	0
≤ 69 days' gestation	62	89	45
Complete abortion	60	87	45
Incomplete abortion	1	1	0
Continuing pregnancy	2	1	0
70–83 days' gestation	7	20	11
Complete abortion	6	19	10
Incomplete abortion	0	0	1
Continuing pregnancy	1	1	0

Results

A total of 234 consecutive women undergoing medical TOP (<83 days' gestational age) during the period December 2000–July 2001 were observed. There were no exclusions and all women fulfilled the criteria of the 1967 Abortion Act. Their ages ranged from 14 to 41 years. Table 1 shows the gestation at presentation for each age group of women. There was a trend for older women to present later in pregnancy.

The main outcome measures – the rates of complete abortion, incomplete abortion (requiring surgical evacuation) and failed termination (with a continuing pregnancy) – were compared between the three groups of differing mifepristone and misoprostol regimens (Table 2).

All groups showed a high complete abortion rate with a low continuing pregnancy rate.

No women in the 24-hour group, two women in the 48-hour group and seven in the 72-hour group aborted prior to the misoprostol. Only three women in total required surgical evacuation. No women required blood transfusion and there were no admissions for overt pelvic inflammatory disease following the procedures. Women who started hormonal contraception immediately after the procedure did not experience more bleeding problems.

A small number of women did not present for follow up but all local antenatal and gynaecological care is carried out in our unit and it is most unlikely that major problems occurred of which we were unaware. The follow-up period extended for several months after completion of the study and no late complications were identified. The overall incidence of problems was very low.

Discussion

Our study supports the findings of Schaff et al.[4] that a more flexible regimen of mifepristone/misoprostol administration is very effective for medical TOP. In the 72-hour group, more women aborted following mifepristone alone and there was a tendency to require fewer subsequent doses of misoprostol.

At all gestations the administration of a second dose of misoprostol if abortion has not already occurred after 4 hours helps to ensure that termination occurs completely. This practice has recently been confirmed in a study by Ashok et al.[6] In our study there was a low requirement for surgical evacuation for incomplete procedures and a very small number of continuing pregnancies. This makes these regimens appropriate for use in all women up to 84 days' gestational age.

Approximately 30% of women with pregnancies with a gestational age of 70–83 days required further doses of misoprostol to effect abortion. If the women are prepared for the possibility of a lengthier procedure, the subsequent complete abortion rate is also very good. Initially when our unit commenced performing the terminations at 70–83 days' gestation women were allowed home at 1600 hours even if abortion had not occurred. Two pregnancies (Table 2) remained viable at review and subsequent management was more difficult because of the increased gestational age. It was therefore decided to change the discharge policy in these later gestations to ensure that products of conception were identified prior to the woman going home. This does not seem necessary for gestations up to 69 days as most terminations complete at home even if not completed in hospital.

The failure rate in the 24-hour group appears higher than the other two groups but is still within acceptable limits. The two women with ongoing pregnancies in the ≤ 69 days' gestation group received oral misoprostol. Our patients are encouraged to accept vaginal misoprostol due to its increased effectiveness but occasionally women still opt for oral administration.[7]

In conclusion, the numbers in this initial study are small but the results suggest that an increased flexibility in the timing of mifepristone and misoprostol administration contributes to the acceptability of the procedure without decreasing its efficiency. We have shown that flexible regimens can be used successfully in a local service catering for all women presenting for medical TOP up to 84 days' gestation.

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Funding. None identified.

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SERVICE DELIVERY

Providing information for young people in sexual health clinics: getting it right

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Abstract

Background. *The need to improve the quality and availability of information on sexual health is identified as a key element in achieving the aims set out in the* National Strategy for Sexual Health and HIV. *Providing information about sexual health to young people poses particular challenges because of the sensitive nature of the issues and because of the difficulties that young people may face in sourcing information and asking questions of professionals.*