Medical termination of pregnancy in the late first trimester

P Stewart, FRCOG, Consultant Obstetrician and Gynaecologist; J Fletcher, RN, MA, Clinical Nurse Specialist, Royal Hallamshire Hospital, Sheffield, UK; A Sharma, MRCOG, Consultant in Family Planning and Reproductive Health Care, Central Health Clinic, Sheffield, UK

Correspondence: Mr P Stewart, Department of Obstetrics and Gynaecology, Royal Hallamshire Hospital, Glossop Road, Sheffield S10 2JF, UK. E-mail: peter.stewart@sth.nhs.uk

Journal of Family Planning and Reproductive Health Care 2003; 29(4): 243–244

Abstract
In the UK, mifepristone and gemeprost are licensed for medical termination of pregnancy (TOP) in the first trimester up to 63 days’ amenorrhoea. Current practice, however, is to use low-dose (200 mg) mifepristone and misoprostol. We report a large cohort study using these drugs for medical TOP in the first trimester after 63 days amenorrhoea. Of 415 patients undergoing the procedure, 392 (95%) aborted completely and 96% required only two doses of misoprostol. We conclude that the regime is effective with few complications, however certain safeguards may be necessary for its widespread introduction.

Background
The Royal College of Obstetricians and Gynaecologists (RCOG) in its evidence-based guidelines in 2000 stated that ‘ideally, abortion services must be able to offer a choice of recommended methods for relevant gestation bands’. In the RCOG audit of abortion services in the same year it found that fewer than 25% of National Health Service (NHS) hospitals offered both medical and surgical terminations in the first trimester. The licensed regime for medical termination of pregnancy (TOP) involves the administration of oral mifepristone 600 mg followed 48 hours later by 1 mg vaginal gemeprost (Cervagem®). The regime is, however, only licensed in the first trimester up to 63 days of amenorrhoea. Following World Health Organization (WHO) guidelines many units now use a regime of 200 mg mifepristone followed by the vaginal administration of 800 μg misoprostol. This regime offers the advantage of much reduced costs and the fact that misoprostol is easier to store and handle than Cervagem. A similar regime using multiple doses of misoprostol is now well recognised for management of TOP in the second trimester.

Medical TOP in the late first trimester has been described in a very recent study. We describe here a further large cohort study using medical termination in the first trimester of pregnancy after 63 days amenorrhoea.

Methods
All patients attending the Integrated Termination of Pregnancy Service in Sheffield from January 2000 to December 2002 requesting first-trimester TOP were offered either a surgical or a medical procedure. All patients were offered an ultrasound scan to confirm gestation and screening for sexually transmitted infections. Those patients who chose a medical procedure were given 200 mg mifepristone, usually at the Central Family Planning Clinic in Sheffield. They returned 48 hours later to the Termination Unit at the Royal Hallamshire Hospital for their prostaglandins. The initial treatment was 800 μg misoprostol given vaginally and this was repeated 6-hourly up to a maximum of four doses.

Ultrasound facilities are available on the unit if required but are not used routinely to confirm abortion. All patients are given emergency contact numbers after their discharge and are offered a follow-up appointment at the Central Family Planning Clinic.

Results
During the trial period 415 patients with 63–84 days amenorrhoea requested medical TOP (Table 1). Gestation was confirmed by ultrasound in 413 patients (99.5%). One patient did not attend for her prostaglandins. There was no record of her continuing the pregnancy in the district or of being admitted to hospital and it was assumed that she had miscarried. There were some minor deviations from protocol in those patients receiving multiple doses of prostaglandins (Table 2). A total of 314 (76%) patients agreed to have a 100 mg diclofenac suppository at the time of their first misoprostol administration, 160 (39%) had additional oral analgesia, 97 (24%) had 50 mg intramuscular pethidine and 154 (37%) had no additional analgesia.

Complete abortion occurred in 392 (94.6%) patients and 375 (91%) patients were managed as day cases. There were three (0.7%) ongoing pregnancies requiring surgical termination. There were 11 (2.6%) patients who required...
surgical intervention at the time of the procedure on account of retained products and haemorrhage. Eight patients had evidence of retained products after discharge home requiring further treatment, either surgically or with further prostaglandins.

Conclusions
Medical TOP in the late first trimester using the regime described has an acceptable success rate. When judged by the efficacy of medical termination in the early part of the first trimester the results are comparable (Table 3). The slightly higher ongoing pregnancy rate necessitates effective follow-up for those patients who do not abort during their time in the termination unit.

The need for surgical intervention at the time of abortion in over 2% of patients suggests that this technique may not be suitable for TOP outside of the setting of an established gynaecological unit. Our results do indicate, however, that it appears to be an acceptable method of termination in the late first trimester and can be safely introduced into a wider practice.

Acknowledgements
The authors would like to acknowledge the excellent work of all the doctors and nurses who work in the Central Health Clinic and the Gynaecology Unit in the Royal Hallamshire Hospital, which makes up the Sheffield Integrated Termination of Pregnancy Service.

Statements on funding and competing interests
Funding. None identified.
Competing interests. Mr Stewart has in the past received research grants from the manufacturers of mifepristone.

References

Table 3 Complications and outcome for the study cohort compared with a contemporaneous group of patients at gestation less than 63 days amenorrhoea

<table>
<thead>
<tr>
<th>Complication/outcome</th>
<th>&gt;63 days (n = 414)</th>
<th>&lt;63 days (n = 1040)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing pregnancy</td>
<td>3 (0.7)</td>
<td>5 (0.4)</td>
</tr>
<tr>
<td>Surgical intervention at time of procedure</td>
<td>11 (2.6)</td>
<td>7 (0.6)</td>
</tr>
<tr>
<td>Retained products after discharge home</td>
<td>8 (1.9)</td>
<td>27 (2.5)</td>
</tr>
<tr>
<td>Blood transfusions</td>
<td>2 (0.5)</td>
<td>0</td>
</tr>
<tr>
<td>Overall ‘success rate’</td>
<td>94.8%</td>
<td>96.6%</td>
</tr>
</tbody>
</table>