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Low Dose Mifepristone For Early Abortion

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OBJECTIVE – To find out the efficacy of low dose of mifepristone for inducing abortion ; 200 mg mifepristone followed by 600 µgm misoprostol was used to induce abortion. **METHODS** – In this prospective clinical study 120 women asking for early pregnancy abortion were given 200 mg mifepristone followed by 600 µgm misoprostol, both orally. **RESULT** – 95.8% (115 out of 120) women aborted completely with this regime. **CONCLUSION** – Mifepristone in a dose of 200 mg followed by 600 µgm misorprostol is effective in inducing abortion of early pregnancy.

Key word : mifepristone, misoprostol, termination of early pregnancy

Introduction

Approximately 55 million pregnancies are terminated each year by abortion. In developing countries where abortion is legal but surgical methods are not widely available, mifepristone could provide women their only option for safe abortion. Mifepristone, an anti-progestogen followed by a prostaglandin analogue like misoprostol is being used as a medical alternative to surgical termination of early intrauterine pregnancy.

Materials and Methods

The study population included 120 pregnant women requesting legal termination of pregnancy. They were in good general health, with a menstrual delay of upto 49 days from the last menstrual period. Other inclusion criteria were a positive pregnancy test and a confirmation of intrauterine pregnancy of seven weeks or less by a pelvic examination or ultrasound.

Exclusion criteria were

- medical conditions contraindicating the use of these drugs viz. adrenal, renal or hepatic disease hypertension or glaucoma or asthma
- history of thromboembolism
- history of pruritis of pregnancy
- pregnancy with IUCD in situ
- suspected or proven ectopic pregnancy
- heavy smoking
- breast feeding
- history of previous two cesarian sections
- pregnancy of more than seven weeks duration.

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Detailed medical history was taken, examination was done, hemoglobin estimated and blood group determined. Baseline characteristics of all the women were similar in all important aspects. They were between 18 to 40 years of age. The period of gestation was between 33 to 49 days from the last menstrual period. Out of the 15 nulliparas 10 were unmarried. There were 105 multiparas.

A single oral dose of mifepristone 200 mg followed 48 hours later by oral misoprostol 600µgm (both were taken by the women in the OPD in the presence of the doctor) were administered. The women were observed for 3 hours following the dose of misoprostol and then sent home. They were asked to maintain a record of the time of abortion, number of days of bleeding and occurrence of any possible side effects a list of which was given to them. Requirement for D and C if the need arose was also explained. The most important part of counselling was that if the abortion did not take place, they could not continue pregnancy and a surgical abortion would be required since these drugs are potential teratogens[1]. Additional 400 µgm misoprostol was given if abortion did not begin 24 hours after the intial dose of misoprostol. They returned 7 days later to check for complete abortion by pelvic examination and / or ultrasound and to also report on the blood loss. The next visit was after the next menstrual cycle for contraceptives.

The primary outcome measure was complete abortion confirmed by ultrasound. Incomplete abortion included those requiring curettage for retained products or excessive bleeding. A missed abortion included a non-viable pregnancy on ultrasound and a failed abortion was the pregnancy continuing despite the drugs. Secondary outcome measures included side effects like nausea, vomiting, diarrhea, lower abdominal cramping or need for blood transfusion. The side effects were expained to the women.

Results

After 7 days following misoprostol the results were -

Complete abortion after initial dose of misoprostol	115
Complete abortion after repeat dose of 400 µgm of misoprostol given 24 hours after the first dose.	3
Incomplete abortion	2

There were three women who did not start pain or bleeding even 24 hours after misoprostol, so a repeat dose of misoprostol 400 µgm was given orally subsequently resulting in expulsion of products confirmed later on by sonography.

Side effects : Women were advised to note side effects for which symptomatic medicines were provided. For excessive bleeding, tranexemic acidwas given. Following were the side effects as reported by the women –

Nausea	:	7
Vomiting	:	2
Diarrhea (after misoprostol)	:	12
Lower abdominal pain	:	90
Fever	:	1
Excessive bleeding	:	25

Misoprostol – abortion interval is given in Table I.

Table I : Misoprostol – Abortion Interval

Interval (Hours)	No.
Before misoprostol	2
4 – 8	80
8 – 12	20
12 – 24	16
> 24	2

Self reported bleeding pattern was -

a)	Amount		
	Heavy	-	25 (20.8%)
	Normal	-	95 (79.2%)
b)	Duration		
	5 – 9 days	-	96 (80%)
	10 – 15 days	-	23 (19.2%)
	> 15 days	-	1 (0.8%)

We encountered no emergency requiring immediate intervention or blood transfusion.

Discussion

There are various reports stating that both 200 mg and 600mg of mifepristone when followed by oral misoprostol have comparable efficacy[2,3,4]. Out of all prostaglandin analogues, misoprostol (a prostaglandin E_1 analogue) is currently favored because of its safety, low cost, availability, stability at room temperature and oral route of delivery[5].

Acceptability of this medical abortion technology was notably high and all the women showed willingness to opt for the same method again in case of need. They all liked the concept of aborting in the privacy of their home. Medical abortion is a revolutionary addition to women's health care. Clinical trials can only help refine the regimen itself. It is a nonsurgical method that closely mimics spontaneous abortion.

References

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