



## Domicilliary use of Oral Mifepristone and Misoprostol in First trimester Medical Abortion

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### Abstract

**Objective:** To evaluate medical abortion by Domicilliary administration of mifepristone and Misoprostol by assessing efficacy and women's acceptability.

**Methods:** This was a retrospective study of 80 patients done from Jan 2017 to Jan 2018. Women with amenorrhoea of less than or equal to 63 days are advised to self administer 200 mg Mifepristone orally at home on day1. 48 hrs later, oral 800 µg Misoprostol . All women followed up on day 14 of tab. Mifepristone for abortion confirmed by usg.

**Results:** Efficacy of regimen was 100% in gestational age up to 49 days and 95.45 % in gestational age of 50-63 days. The overall success rate was 97.5%. most of the women were ready to choose same method in future if required.

**Conclusion:** Medical abortion was simplified by Domicile use of oral mifepristone and Misoprostol as it required less hospital visits and less supervision by trained persons. Acceptability of home self-administration was high. Hence home administration is safe and feasible for introduction into medical abortion services in India.

**Keywords:** Medical abortion, Mifepristone, Misoprostol.

### Introduction

Medical abortion consists of usage of drugs to terminate a pregnancy. It is an important alternative to surgical methods. WHO recommends initial dose of mifepristone followed by Misoprostol 36-48 hours later. In home medical abortion, pregnant woman takes mifepristone initially and later takes misoprostol at home. The home based medical abortion intends to simplify the abortion regime, give privacy at home and family members' support. In 2002, the Drug Controller of India approved

mifepristone and misoprostol combination for medical abortion. Clinical trials from Turkey and the USA report rates of complete abortion from 91%-98% for pregnancies up to 9 weeks when administered at home<sup>1</sup>. A regime of reduced dose of mifepristone and misoprostol may increase the feasibility to provide non-invasive abortion in rural areas ; thereby greatly increasing access to safe abortion in India.<sup>2</sup> We thus assessed the feasibility and acceptability of such a simplified abortion regime.

**Objective of the Study:** To evaluate the simplification of medical abortion by home administration by assessing –

1. Feasibility of complete and successful medical abortion at home.
2. Efficacy.
3. Women's acceptability of home self administration.

### Material and Methods

This was a retrospective study of 80 patients seeking for Medical abortion with amenorrhoea less than or equal to 63 days gestation from . jan 2017 to jan2018 attending the private clinic.

### Inclusion Criteria

1. All women requesting for medical abortion.
2. Gestational age less or equal to 63 days by LMP, clinical assessment or USG Pelvis.
3. Agrees for follow-up visit, provides address and/or telephone no. for purpose of follow-up. And Consent.

### Exclusion Criteria

1. Gestational age more than 63 days.
2. Willing for surgical method of abortion.
3. Ectopic or Molar pregnancy.
4. women suffering from cardiac disease

### Patient counselling

1. Decision of abortion taken by patient was voluntary
2. Both medical and surgical options of MTP given. Risk and benefits of both methods explained. Potential teratogenicity of tablet mifepristone and misoprostol was explained, once administered, the abortion should be completed either medically or surgically.
3. Risk of incomplete abortion and bleeding necessitating surgical evacuation was explained.
4. Confidentiality was assured to patients.
5. Advised them to come for follow-up on day 14 of tab. Mifepristone and also discussed future contraception. No control

group was analyzed. We did not want to compare home use of misoprostol with the standard regime of hospital use.

### Protocol

- 1) Informed consent was signed by patient with a relative witness
- 2) Detail history and complete examination was done.
- 3) Investigations—Hb%, Blood group and Rh typing, Urine, USG, others if required.
- 4) Women were asked to take Tab mifepristone 200mg and Misoprostol 800 microgram orally 48 hrs after Tab. Mifepristone at home
- 5) Women were counselled to expect pain in abdomen, bleeding per vagina after taking misoprostol.
- 6) Symptomatic treatment with tab. Paracetamol 500mg, Tab. Pantapazole and Domperidone, Tab. Tranexamic acid 500mg thrice a day for two days if bleeding persisted more than normal menstrual bleeding
- 7) All Rh negative women received Anti-D Immunoglobulin 300 microgram within 72 hours after ingestion of Tab. Mifepristone.
- 8) All patients received Tab. Orni o bd for 5 days from day 3.
- 9) Follow up visit on day 14 of tab. Mifepristone by usg to r/o complete abortion.
- 10) Women were told to call telephonically and come at any time if they had excessive bleeding (soakage of 2 or more large pads per hour for 2 or more consecutive hours)

### Failure of Procedure

- 1) Not achieved complete abortion on day 14 after taking Tab. mifepristone.
- 2) Needed surgical evacuation for incomplete abortion, Missed abortion, heavy bleeding after the consumption of Tab. Misoprostol.
- 3) live pregnancy on USG on Day 14.

**Table No 1: Gravida**

G1	6	7.5%
G2	23	28.75%
G3	30	37.5%
G4& above	21	26.5%

Most of the patients were Gravida 3.

**Table no 2: Gestational age in weeks**

Ga in wks	No of patients	percentage
5-6	11	13.75
6.1-7	25	31.25
7.1-8	24	30.00
8.1-9	20	25.00

Most of the patients for MTP were at 6.1-7 weeks and Mean Gestational age was 49 days

**Table 3: Mode of previous delivery**

Mode of delivery	Number of cases	percentage
Previous normal delivery	62	83.78%
Previous lscs	12	16.22%

Here n=74 because 6 were Primigravidae

**Table 4: Duration of bleeding**

Duration in days	Number of cases	Percentage
<5	20	25%
5-7	38	47.5%
8-10	21	26.25%
>10	1	1.25%

Most (43.75%) women had bleeding for 5-7 days

**Table 5: Efficacy of regime in various gestational ages**

Gestational age	Success rate	Failure rate [%]
Upto 49 days (n=36)	100	0
50-63 days (n=44)	95.45	4.55

Regime is highly Effective (100%) in early Gestational age

**Table 6: Reason for satisfaction with home use**

Reasons	No of cases	Percentage
Less visits	35	43.75
Continue household responsibility	20	25
Convenience	38	47.5
Feels better at home	42	52.5
Privacy	25	31.25

Convenience, homely environment & less visits satisfied home use.

**Table 7: Choose medical abortion in future if required**

Choose medical abortion in future if required	No of cases	Percentage
yes	77	96.25
No	3	3.75

**Table 8: Efficacy**

efficacy	No of cases	Percentage
success	78	97.5
failure	02	2.5

2 women underwent dilatation and evacuation after confirmation of failure by day14 usg.

**Discussion**

Primigravidae seeking for medical abortion in study of Mundle et al<sup>2</sup> were 3.3% and in Our study they were 7.5%. So it can be said that medical abortion with tab. mifepristone and tab. Misoprostol is safe, effective and acceptable even in Primigravidae at home. The Mean Gestational age (in days) of women coming for medical abortion in study of Chuni et al<sup>3</sup> was 50.6 days, in study of Hazri et al<sup>4</sup> was 44.2 days, in study of Mundle et al<sup>2</sup> was 42.8 days and in Our study it was 49 days. So, all these Studies are comparable. Abortion failure was because of ongoing pregnancy and incomplete abortion for which did surgical evacuation to complete their abortion. In study of Chuni et al<sup>3</sup>, 1.8% cases had ongoing pregnancy and 7.7% cases had incomplete abortion. In study of Hazri et al<sup>4</sup>, 1.7% cases had ongoing pregnancy and 1.2% cases had incomplete abortion. In study of Mundle et al<sup>2</sup>, 0.7% cases had ongoing pregnancy and 0.7% cases had incomplete abortion. In study of Sheila et al<sup>5</sup>, 1.5% cases had ongoing pregnancy and 0.4% cases had incomplete abortion. In our study, 0.7% cases had ongoing pregnancy and 0.7% cases had incomplete abortion. The overall success rate was good.

Compared reasons for selecting domicilliary use of oral mifepristone and misoprostol administration by the patients with different studies. In study of Hazri et al<sup>4</sup>, the reasons were Less visits (27.4%), Continue household responsibility (20.7%), Convenience (28.6%), Feels better at home (21.6%) and Privacy (34.4%). In study of Mundle et al<sup>2</sup> the reasons were Less visits (65.3%), Continue household responsibility (20%), Convenience (3.8%), Feels better at home (3.8%) and Privacy (3.8%). In our study, the reasons were fewer visits (43.75%), Continue

household responsibility (25%), Convenience (47.5%), Feels better at home (52.5%) and Privacy (31.25%). In all, females preferred to continue house hold responsibilities, take mental support from family member and maintain privacy. In study of Mundle et al<sup>2</sup> 97.9% women; in study of Hazri et al<sup>4</sup> 96.5% women and in Our study 96.25% women were ready to choose medical abortion in future. The method was acceptable in future as they were satisfied. Success rate of the regimen in different studies were 86% in study of Chuni et al<sup>3</sup>; 96.7% in study of Hazri et al<sup>4</sup>; 98.6% in study of Mundle et al<sup>2</sup>; 97.4% in study of Sheila et al<sup>5</sup>; 89.2%, in study of Ngo et al<sup>1</sup>; 89% in study of Bracken Hillary<sup>7</sup>; 95.4% in study of Guengant et al<sup>8</sup> and 97.5% in Our study, which are comparable to other studies

### Conclusion

Medical abortion was simplified by Domicilliary use of oral mifepristone and misoprostol as it required less hospital visits & less supervision. Women felt better at home as they could fulfill domestic responsibilities. Efficacy of regimen used in our study was excellent as success rate was 97.5%. The regimen was more effective for early gestational age (up to 49 days) .Minor side effects were treated by only symptomatically. Being non-invasive, women were more comfortable and accepted the regimen. This method can be used in an outpatient clinic provided referral is possible. Morbidity and mortality due to illegal abortions can be markedly reduced. Hence, domicile administration of oral mifepristone and misoprostol is safe and feasible for introduction into medical abortion services in India.

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