

# Safety of Medical Methods in Second Trimester Abortion at a District Hospital in Tamilnadu

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**Abstract:** Although the vast majority of abortions are performed in first trimesters still 10% - 15% of terminations have taken place in second trimester globally. As compared to first trimester, second trimester abortions disproportionately contribute to maternal morbidity and mortality, especially in low resource settings where access to safe second trimester abortion is limited. Main aim of the study was to establish the safety of medical method for second trimester abortion with least morbidity and mortality. Induced second trimester abortion is high despite the availability of first trimester abortion services and also due to diagnosis of anomalies mainly in second trimester. Increased accessibility and availability of safe second trimester abortion services, counselling and logistical support are helpful to minimize late abortion.

**Keywords:** Abortion, Mifepristone, Misoprostol, second trimester, pregnancy termination

## 1. Introduction

Second trimester abortion is termination of pregnancy at 13-28 weeks, which again is sub-divided into early, between 13 to 20 weeks and late, between 20 – 28 weeks. Globally over 42million abortions are performed annually and 10-15% of the cases take place in second trimester period over half of which are considered unsafe, contribute to maternal deaths. There were 29 abortions per 1000 women aged 15-44years in developing countries.

Abortion related complications account for approximately 13% of maternal deaths worldwide, regularly estimated 47000 deaths per year.

Second trimester abortion carries a higher risk of morbidity and mortality as compared to first trimester abortion, especially in developing countries. Second trimester abortion were more common among women of rural areas.

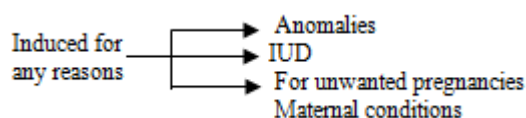
50% maternal deaths due to sepsis are related to illegal induced abortion. MMR in india has not declined significantly in the past 15 years.

## 2. Methods

It is a retrospective analytical study over past 6 months (January-2020 to June 2020) of second trimester abortions of 13 – 28 weeks at a District Hospital in Tamilnadu.

### Inclusion criteria

Patients who were all admitted and treated for second trimester abortions spontaneous or induced, between 12 weeks and 28 weeks.



### Exclusion criteria

- Patients having miscarriages before 12 weeks of gestation
- Patients who terminated the pregnancy after 28 weeks for any reasons.

Retrospective observational study was conducted in the Department of Obstetrics and Gynaecology at District Hospital, Virudhunagar over a period of 6 months. The data were collected from the Medical case records and analysed for the epidemiology, etiology, complications and duration of hospital stay, morbidity and mortality using statistical analysis.

Medical methods were used for second trimester terminations. On the first day Tablet Mifepristone 200mg was given orally. Second day mechanical dilation with foley 's bulb was done. Foley 's bulb retained for 24hours. Third day Tablet Misoprostal 200mcg alone was used in 2 to 3 doses at 3 hours interval.

## 3. Results

Out of these 43cases who had undergone second trimester abortion during the study period. Incidence of second trimester abortion was 35%

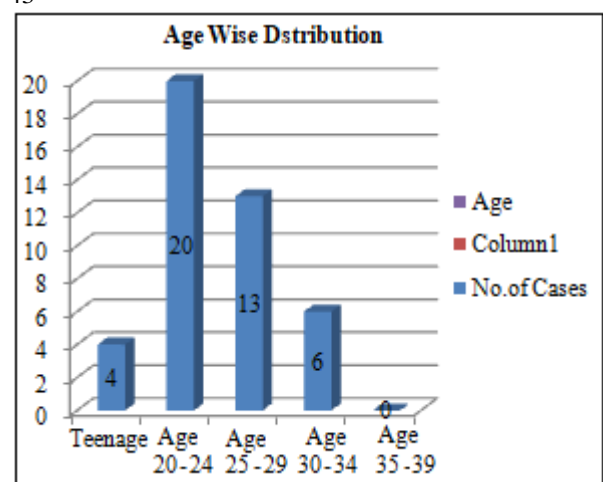
Failure ending in hysterotomy - 1

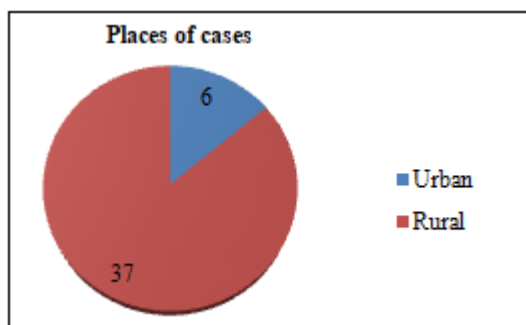
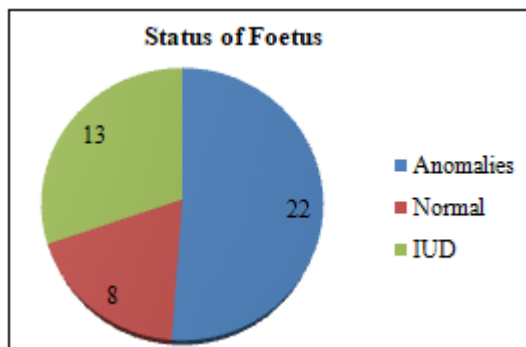
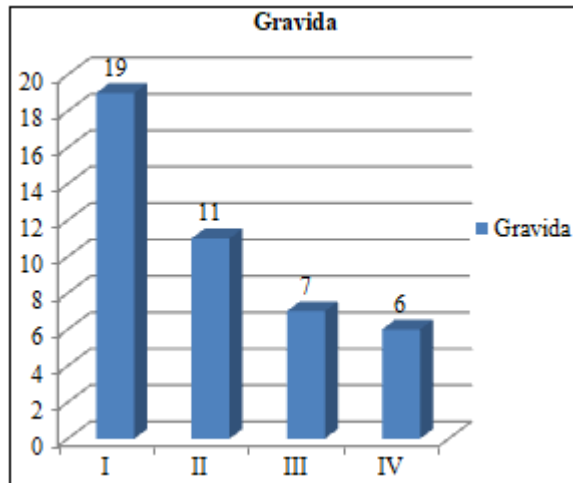
Repeat MVA - 1

Combined with TAT -2

Failure rate =  $\frac{\text{No. of Failed Cases}}{\text{Total cases}} \times 100$

$$= \frac{2}{43} \times 100 = 4.6\%$$





#### 4. Discussion

Although second trimester abortions account for a relatively small proportion of induced abortions, it is associated with a disproportionate morbidity. Two thirds of major abortion related mortality occurs in pregnancies terminated after 13 weeks most commonly in countries that restrict access to safe abortion.

Although Dilation and Evacuation remains the most prevalent surgical method of second trimester abortion, it has the following disadvantages:

- Mortality with D & E has remained constant since 1980's
- It needs more expertise to perform the procedure.
- The performance of D & E at later gestational ages often requires multiple sets of osmotic dilators over many days increasing the financial burden related to travel, lodging and time away from work. Other surgical methods of second trimester abortion are obsolete now.

So our method of T.Mifepristone, mechanical dilation and T.misoprostal is one of the most effective method with least

complications low mortality, less requirement of repeated MVA and reduced duration of hospital stay.

The wide spread use of prenatal diagnosis has increased the number of patients undergoing second trimester termination for fetal anomalies.

Low cost, ease of administration and presumed efficacy have made Misoprostal a drug of choice.

When non surgical option for abortion exists, many women choose it with hopes of avoiding instrumentation (or) assuring greater privacy.

Mifepristone is an antiprogesterin that competitively blocks both progesterone and glucocorticoid receptors. By opposing the activity of progesterone, Mifepristone elicits a variety of effects that make the uterus more susceptible to abortion. These effects cervical dilation, decidual necrosis, increase endogenous PG production and increase sensitivity to exogenous PGs.

Indeed Mifepristone administration gradually elicits a 5-fold increase in sensitivity to Prostaglandins 24 to 48 hours after its administration. The synergy between Mifepristone and Prostaglandins permits greater efficacy of Prostaglandins at lower doses, minimizing the side effects.

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