

Title : Subsequent pregnancy outcome following MTP: Medical Versus Surgical Method

Author : *Dr Rath S K, **Dr Chalukya P

*Professor and Head, ** Asst. Professor

Address for Correspondence : Dept of Obs & Gyanec, Padmashree Dr Vithalrao Vikhe Patil Foundation's Medical College, Ahmednagar.

Abstract -

Background - With the advancement in procedures for termination of pregnancy as well as amendment of MTP act, there has been increasing use of termination by means of medication. However, limited information is available regarding the effects of this procedure on subsequent pregnancies. **Method** - A retrospective analysis of records of all admissions and day care procedures in pregnant patients in our institute was carried out. A simple inclusion criteria was kept as multigravida with history of first trimester termination of immediate preceding pregnancy. **Outcome**- In the index pregnancy in women who had a first-trimester medical abortion were compared with those who had a first-trimester surgical abortion in immediate preceding pregnancy. **Results** - Among pregnancies in women who had a previous first-trimester medical abortion or surgical abortion, there were 20 ectopic pregnancies, 151 spontaneous abortions, 62 preterm births and 47 births with low birth weight. After adjustment for maternal age, interval between pregnancies, gestational age at abortion, parity, and urban or non-urban residence, medical abortion was not found to be associated with a significantly increased risk of ectopic pregnancy, spontaneous abortion, preterm birth or low birth weight. Gestational age at medical abortion was not related with any of these adverse outcomes. **Conclusion** - A previous medical abortion, as compared with a previous surgical abortion, does not affect the risk of an adverse outcome in subsequent pregnancy.

Key words : Medical termination of pregnancy, Pregnancy outcome, Medical Termination of Pregnancy Act.

Introduction : Medical Termination of Pregnancy Act, enacted in 1971 has been a milestone in providing reproductive health care in India^[1]. Over the last four decades, the number of recorded terminations in a year has grown from 24,000 to 7,00,000^[2]. Apart from the increasing numbers, there has been also progress in the methods of termination. Suction evacuation in the first trimester has remained the principal surgical means of termination. Medical (Non surgical) means of termination was practiced earlier usually for second trimester abortions. However, with the advent of Mifepristone and Prostaglandins, non surgical method of termination in first trimester has gained popularity because of ease and convenience^[3,4]. The combination of Mifepristone and Misoprostol has been made available as over the counter sale in US, where one needs a prescription even for many common medications^[5]. In India, the MTP act has been amended in 2002 to facilitate the prescription of this combination^[6].

Main disadvantage of non surgical means is unpredictability of time of completion of the process and incomplete abortion^[7,8]. Need for conversion to surgical method arises either due to this or failure of the spontaneous expulsion process to commence. Ease of administration and sense of control by the patient is always weighed against the risks just mentioned. As regards long term, is there any difference between surgical and non surgical means of termination? Oligomenorrhoea and amenorrhoea as a result of over enthusiastic curettage has been documented^[9]. However, there is not much data on the outcome of subsequent pregnancy following a first trimester MTP by medical means. Is there any difference in such outcome when compared to surgical evacuation? This study was undertaken to answer this limited question.

Material & Method: This study was carried out as a retrospective analysis of records of all admissions and day procedure carried out in pregnant patients in our institute during 2012 and 2013. Simple inclusion criteria were kept as multi gravida with history of first trimester termination of immediate preceding pregnancy. Cases without any associated medical disorder during past and present pregnancy were

included. Present pregnancy had reached finality. All such cases identified were divided to group A and B on the basis of surgical or non surgical means of termination of the immediate preceding pregnancy. Outcome measures of the study were complete abortion, Ectopic pregnancy, Antepartum hemorrhage, Preterm delivery, Term delivery, Low Birth weight and Post partum hemorrhage. In the measure of complete abortion, only spontaneous abortions were included whether completed naturally or manually from inevitable and incomplete stages.

RESULTS & DISCUSSION :

Table 1 : Total cases -

Event	Total No of Cases during the period	Number of meeting the inclusion criteria
Complete	432	151
Ectopic	28	20
Delivery	4194	1071
Total	4654	1251

Out of 1251 cases meeting the inclusion criteria, 998 fell in to group A and 253 fell in to group B. Distribution of outcome measures as mentioned earlier is given in Table 2

Table 2 : Pregnancy outcome-

Event	Group A	Group B
Complete Abortion	120	31
Ectopic Pregnancy	16	4
Ante Partum	24	5
Preterm Delivery	50	12
Term Delivery	800	185
Post Partum	17	5
Low birth Weight	78	20

Among pregnancies in women who had a previous first-trimester termination, there were 20 ectopic pregnancies. The incidence rates were 1.6% and 1.5% respectively for medical means and surgical means. Of the total 151 spontaneous abortions 120 were in group A (12%) and 31 were in group B (12.2%). There were 50 preterm births in group A and 12 in group B (5% and

4.7% respectively). Among 98 births with low birth weight, the incidence was 7.8% in group A and 7.9% in group B. Statistical tools were applied with adjustment for maternal age, gestational age at abortion, parity, and urban / non-urban residence. It was found that medical means of abortion was not associated with any significantly increased risk of ectopic pregnancy (relative risk, 1.04 ; 95% confidence interval [CI], 0.76 to 1.41), spontaneous abortion (relative risk, 0.87; 95% CI, 0.72 to 1.05), preterm birth (relative risk, 0.88; 95% CI, 0.66 to 1.18), or low birth weight (relative risk, 0.82; 95% CI, 0.61 to 1.11). There was no significant difference in the incidence of APH and PPH between the two groups. Gestational age at medical abortion was not related to the incidence of these adverse outcomes.

Conclusion : Though there are not many studies on the subject, few other workers have also reported that the medical means of first trimester termination does not affect subsequent pregnancy outcome any differently than the time honored surgical means^[10,11]. Therefore it may be concluded that a previous medical abortion, as compared with a previous surgical abortion, does not increase the risk of an adverse outcome in subsequent pregnancy.

References :

- 1) Medical Termination of Pregnancy Act of India 1971
- 2) M. E. Khan , Sandhya Barge and George Philip . Abortions in India; An overview Centre for Operations Research and Training (CORT) Working Paper No. 7 : MOH year book : FWP in India 1993-94
- 3) Hemlin J, Moller B. Manual vacuum aspiration, a safe and effective alternative in early pregnancy termination. *Acta Obstet Gynecol Scand.* 2001;80:563-67.
- 4) Edwards S, Tureck R, Fredrick M, Huang X, Zhang J, Barnhart K. Patient acceptability of manual versus electric vacuum aspiration for early pregnancy loss. *J Womens Health.* 2007;16(10):1429-143
- 5) Medical Termination of Pregnancy Act of India (Amendment) 2002

- 6) Schraff P, Eric A .Mifepristone: Ten years later. *Contraception* 2010; 81 (1) :225-229
- 7) Kruse K, Beth A. Management of Side effects and complication of Medical abortions. *Am J of Obstet & Gynecol* 2000 ; 183(2)
- 8) Symonds I, Arulkumaraan S, Malcom E.Essential Obstetrics and Gynaecology 5th edition p 808
- 9) Virk J, Zhang J, Olsen J .Medical Abortion and the Risk of Subsequent Adverse Pregnancy Outcomes. *New Eng J Of Med* 2007; 357:648-653
- 10) Zhang J Does Medical Abortion Compromise Subsequent Pregnancies. *JWatch Women's Health* 2007: 5-6

MEDICAL APRON - :

The practice of wearing white coat was first introduced in the 19th century in Canada by Dr. George Armstrong (1855–1933). Then the gleaming white coat - in many respects became a symbol of authority and a life-giving profession instead of just preside over its ebbing away. The whiteness of the coat provided a sense of trust, belief and hope for the patients and perhaps that is why it still continues to be the formal dress code in all medical schools.

Although the color of the coat still remains white, however, some unseen dirt has gradually been diminishing its sheen. Gray shades have been added to it by some of the unethical practices that have started occurring in the medical profession in modern times. The whiteness of this coat has been faded by the attitude of our younger doctors. This present generation who had struggled hard for admission to medical schools and the associated pride of wearing the symbolic white coat find it unfashionable once they leave the medical school or perhaps they do not want to shoulder the responsibility the coat conveys.



(Source : "Andre Picard (2012-07-02). "Why do physicians wear white lab coats?".

The Globe and Mail. Retrieved 2012-11-10.)