Efficacy of medical abortion by methotrexate and misoprostol administration (Prostaglandin E1) at the first trimester of pregnancy

Vahid Roudsari F. (M.D.)[1], Ayaty S. (M.D.)[1], Shakeri M.T. (M.D.)[2], Ghorbani S. (M.D.)[1]
1- Department of Obs. & Gyn., Ghaem Hospital, Mashad University of Medical Sciences, Mashad, Iran.
2- Department of Social Medicine, Biostatics Unit, Faculty of Medicine, Mashad University of Medical Sciences, Mashad, Iran.

Abstract

Introduction: Induced abortion is a medical or surgical termination of pregnancy before the time of fetal viability with maternal or fetal indications. Regarding abundant complications of surgery, anesthesia, need for hospitalization, risk of uterine perforation and other early or late complications, the necessity to terminate pregnancy by medical methods is seriously felt. The aim of this study was to evaluate the efficacy of medical abortion with methotrexate and misoprostol (prostaglandin E1) at the first trimester of pregnancy.

Materials & Methods: This descriptive study was done on 100 women that had been referred at their first trimester of pregnancy to the hospitals of Mashad University of Medical Sciences during 2004 to terminate their pregnancies due to maternal or fetal indications. The data were gathered according to patients' answers to questions and observation of outcomes as the patients went through labor stages. At first, 50mg of methotrexate per unit of body surface area was injected intramuscularly and after 72 hours, the first dose of misoprostol (800μg) was administered intravaginally. The second dose of misoprostol was repeated 24 hours after the first dose if abortion did not occur. Sonography was performed 7 days after the last dose of misoprostol, to determine the size of probable residue of pregnancy. The gathered data were descriptively analyzed and frequency distributions were assessed by SPSS software. $P \leq 0.05$ was considered significant.

Results: Eighty-one women (81%) had successful complete abortions, among whom pregnancy was terminated in 60 cases (74.1%) following the first dose of misoprostol. 40 patients (25.9%) needed a second dose of misoprostol. 21 women had complete abortion, but 19 required curettage. In this study, failure rate was higher in cases with missed abortions ($p<0.05$). Duration of uterine content expulsion ($p<0.001$) were higher in this medically induced abortion. No important side-effects or complications were noted due to methotrexate or misoprostol administration.

Conclusion: Medical abortion in the first trimester of pregnancy with methotrexate and misoprostol is safe and cost-effective.

Key Words: Medical abortion, Misoprostol, Methotrexate, First trimester, Pregnancy, Viable Fetus, Maternal, Induced abortion, Blighted ovum.

Corresponding Author: Dr. Fatemeh Vahid Roudsary, Department of Obs. & Gyn., Ghaem Hospital, Mashad, Iran.
E-mail: ff_vahid@yahoo.com

Downloaded from http://www.jri.ir