Intra uterine extra-amniotic versus vaginal misoprostol for termination of second trimester missed miscarriage: a randomized controlled trial

Abo Bakr A. Mitwaly1, Ahmed M. Abbas1*, Mohamed S. Abdellah1

Abstract:

Background: Termination of pregnancy in the second trimester using prostaglandins has been shown to be safe and effective. Misoprostol has multiple routes of administration; oral, vaginal, buccal, rectal and sublingual Objective: The study aims to compare the efficacy and safety of intrauterine extra-amniotic and vaginal misoprostol in a dose of 200 microgram every 4 hours for the termination of pregnancy in cases of second trimester miscarriage. Materials and Methods: A Prospective randomized open labeled clinical trial included patients with missed miscarriage in gestational age between 13 and 24 weeks. Patients were randomized to receive subsequent doses of 200 µg misoprostol every 4 hours either intra uterine extra-amniotic by Foley catheter or vaginally administered. Randomization was completed using a computer-generated random table. The primary outcome of this study was the mean duration from the initial misoprostol dose until complete fetal expulsion (induction-expulsion interval). Results: The study included 180 women. The mean gestational age was 17.74 weeks. The mean time to complete miscarriage in the intra uterine extra-amniotic group was 5.27 hrs, which was significantly lower (p=0.001) than the vaginal group (9.92 hrs). Side effects were more common in the vaginal group. Conclusions: Intra uterine extra-amniotic misoprostol with a dose of 200 ug every 4 hours appears to be more effective and safer than vaginal misoprostol in induction of second trimester miscarriage. Registration number: (Clinical Trials. Gov; NCT02669420)

Keywords:

Misoprostol, missed miscarriage, termination of pregnancy, Prostaglandins

Published In:

Thai journal of obstetrics and gynecology, Vol. 24 - No. 4 , NULL