

Comparison of the effect of three methods of vaginal misoprostol, letrozole and misoprostol, and the combination of Laminaria and Misoprostol in the cervical preparation among women with under second trimester abortion

Abstract

Background & Objective: Therapeutic abortion in the second trimester pregnancy is the choice treatment in cases with severe anomalies or intrauterine fetal death. It can be done by a number of medical (e.g. misoprostol and letrozole) or mechanical methods (e.g. laminaria). The aim of this study was to compare the efficacy of vaginal misoprostol with and without letrozole and combination of misoprostol and laminaria for preoperative cervical ripening among women with under second trimester abortion.

Methods: In this interventional study, 120 pregnant women with the gestational age of 20 weeks who were candidates for therapeutic abortion were selected and randomly divided in three groups (n=40). Proper counseling was done and a written informed consent obtained before starting the treatment regime. One group received vaginal misoprostol alone and the second group received misoprostol in combination with laminaria and oral placebo. In the third group in addition to cervical placebo in first and second day, letrozole prescribed and in third day patients hospitalized and followed by of vaginal misoprostol and third dose of letrozole. Patients regularly examined every 4 hours and in the absence of abortion, vaginal misoprostol repeated after 4 hours. Patients who have excreted tissue tested with transvaginal ultrasound. No report of products of conception (POC) abortion considered as complete abortion and the patient discharged. For patients who have in completed expulsion of POC, curettage abortion was done.

Result: Combination of misoprostol and laminaria caused not only a significant shorter time interval from the initiation of intervention to abortion, but also

Pain relief was more than the two other groups.

Conclusion: Based on the obtained results, misoprostol in combination with laminaria is recommended for the induction of second trimester therapeutic abortion.

Keywords: Laminaria, Misoprostol, letrozole, Second trimester