Induction of Labor Using Misoprostol with or without Mifepristone in Intrauterine Death: A Randomized Controlled Study

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Abstract : Context: Rapid expulsion of fetus in intrauterine fetal death (IUFD) is usually requested without any medical grounds for it. So; an efficient, safe method for induction of labor (IOL) is required. Objective: To determine if pre-treatment with mifepristone followed by IOL with misoprostol in late IUFD is more efficacious. Methods: We conducted a randomized controlled trial in 100 patients. Group-A women received single oral dose of 200 mg mifepristone, followed by induction with vaginal misoprostol after 24-hour. Group-B women were induced only with vaginal misoprostol. In each group 5 dose of misoprostol was used 4 hourly. If first cycle was unsuccessful, after break of 12 hour, second course of misoprostol was started. The primary outcome was a measure of induction to delivery time and vaginal delivery within 24 hours. Secondary outcome was to measure need of oxytocin and complications. Results: Maternal age, parity and period of gestation were comparable between groups. Number of misoprostol dose needed in group A was significantly less than group B. Mann Whitney U test showed, women in group A had significantly earlier onset of labor, however total induction to delivery interval was not significant. In group-A, 85.7% delivered within 24 hours of first dose of misoprostol while in group-B 70% delivered within 24 hour (p=0.07). More women in Group B required oxytocin. Conclusion: Pretreatment with mifepristone before IOL following late IUFD is an effective and safe regimen. It appears to shorten the duration of induction to onset of labor.

Keywords: induction of labor, intrauterine fetal death, mifepristone, misoprostol

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