A prospective study of comparison of cervical ripening with oral vs vaginal misoprostol in nulliparous women

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Objective : To compare the safety and efficacy of oral, vaginal misoprostol and oxyticin only users for cervix ripening and labor induction in nulliparous women.

Methods : 13 patients were orally administered 50 μg of misoprostol at first then 100 μg every 4 hours and the other 11 patients were vaginally administered 25 μg of misoprostol at first then the same doses every 4 hours. They were nulliparous women with Bishop score 6 or less. Another 24 patients were oxytocin only users for cervical ripening and labor induction, who were nulliparous women with Bishop score 6 or less, and these three groups were compared to each other as shown in results.

Results : There were no differences among these three groups in patient characteristics. In oral misoprostol group, it took shorter time to get Bishop score 8 or more and become get effacement 60% than those of vaginal misoprostol group. On the contrary, in vaginal misoprostol group, it took shorter time to become full dilatation and deliver than oral misoprostol group. However there were no significant statistical differences between two groups in obstetric and neonatal outcomes.

Conclusion : Oral and vaginal misoprostol are effective in cervical ripening but there were no significant statistical differences in perinatal outcomes. Among many regimens of misoprostol administration for cervix ripening in nulliparous women, there is no standardized method until now. More studies will be needed for safe application of this drug.