Can we use a lower intravaginal dose of misoprostol in the medical management of mid-trimester termination of pregnancy? A randomised controlled trial.

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Context: The optimal dose of intravaginal misoprostol to be used in the medical management of mid-trimester termination of pregnancy has not been resolved. A 400mcg dosing regimen is commonly used but is associated with side effects such as fever.

Objective: The objective of this study was to compare the efficacy and safety of intravaginal misoprostol 200 mcg with misoprostol 400 mcg regimen for mid-trimester termination of pregnancy (MTPT).

Methods: This study was a single-centre, single-blinded, prospective randomised controlled trial conducted in a tertiary hospital in Singapore.

Patients: A total of 77 women undergoing MTPT, at gestational ages between 13 to 23 completed weeks, were recruited from December 2010 to May 2012.

Interventions: These women were randomised to receive misoprostol 400 mcg (n=40) or misoprostol 200 mcg (n=37) which was administered vaginally at four hour intervals up to five doses or until abortion occurred.

Main outcome measures: The main outcome measures included the incidence of successful abortions, median induction-to-abortion interval and medications' side effects over 48 hours.

Results: The misoprostol 400 mcg group had a higher incidence of successful abortions (92.5%) compared to the misoprostol 200 mcg (70.3%; p=0.017) group. There was no significant difference in the median induction-to-abortion interval for both groups. The misoprostol 400 mcg group had a higher incidence of fever (70.0%) compared to the misoprostol 200 mcg (24.3%; p<0.001) group. However, the effect of the fever was transient and self-limiting. There was no significant difference for other medication side effects and analgesia requirements for both groups.

Conclusion: The intra-vaginal misoprostol 400 mcg at four hour interval regimen was more effective than
the misoprostol 200mcg regimen for MTPT.