

Does Body Mass Index Matter in the Medical Management of First Trimester Missed Miscarriage? A Sri Lankan Experience

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Introduction: Missed miscarriage in the first trimester can be managed with the misoprostol per vaginal administration. The optimal dosage of misoprostol is still under debate. Doses of 400 microgram and 600 microgram and 800 microgram were tried in the trials and proven effective. Our unit uses 600 micrograms of misoprostol per vaginally and repeat doses administered if the first dose failed.

Methods: The mothers with confirmed diagnosis of missed miscarriage in the first trimester, without vaginal bleeding were selected to the study. Sample size 150. The height and weight measured and Body Mass Index (BMI) calculated. Misoprostol 600 microgram administered. 24 hours allowed for the responses and transvaginal ultrasound scan (TVUS) performed. The endometrial thickness measured as less than 15 mm taken as successful medical management. Others were given another dose of 600 microgram misoprostol. The mean BMI of the responders to the first dose compared with the mean BMI of the mothers who are not responded to the first dose.

Results: 63 mothers were responded to the first dose. 76 mothers responded to the second doses. 11 mothers who were failed with two doses of misoprostol were managed with surgical evacuation. The mean BMI of the responders to the first dose were statistical significantly lower than the non-responders to the first dose.

Conclusion: The BMI influences statistical significantly in the vaginal administration of misoprostol. The high BMI mothers may need higher dose of drug or repeated administration. The clinical significance of this finding needs further research evaluation.