Abstract

Out-Patient Intravaginal Misoprostol versus In-Patient Intravaginal Misoprostol for the Treatment of First Trimester Incomplete Miscarriage in UKMMC: A Randomised Controlled Trial

Annamalai[1], Lim Pei Shan[1], Nur Azurah AG[1], Aqmar Suraya Sulaiman[1], Syed Zulkifli Syed Zakaria[2], Muhammad Abdul Jamil Mohd. Yassin[1]

[1]Department of Obstetrics & Gynaecology, [2] Departmentof Paediatrics, Faculty of Medicine, Universiti Kebangsaan Malaysia Medical Centre, Jalan Yaacob Latif, Bandar Tun Razak, Cheras, 56000 Kuala Lumpur, Malaysia.

Objective:
To assess the efficacy of out-patient intravaginal misoprostol versus in-patient intravaginal misoprostol for the treatment of first trimester incomplete miscarriage.

Methods:
A prospective randomised controlled trial was conducted at a tertiary medical center on 154 patients for the treatment of spontaneous first trimester incomplete miscarriage. The intervention group (n=77) received out-patient administration of misoprostol whereas the control group (n=77) received in-patient administration of misoprostol. The intravaginal misoprostol dosage administered was 800mcg 8 hourly to maximum of 3 doses. They were reassessed at Day 7. The primary outcome evaluated were success of evacuation, side effects, cost and patient acceptability. The secondary outcomes evaluated were mean reduction of endometrial thickness, days of passing out POC, duration of bleeding and mean reduction in hemoglobin. Assessment for treatment failure was done at day 7. Surgical evacuation was then offered.

Results:
Patient's age, ethnic distribution, education level, parity and previous history of miscarriages were comparable between both the groups. The success rate was 89.2% and 85.7% for outpatient and inpatients respectively. Side effects observed include crampy abdominal pain, fever, nausea and diarrhoea were comparable requiring only symptomatic treatment. Duration of bleeding was 5.84 days in the outpatient as compared to 5.92 days in the inpatient group (p=0.420) whereas the mean haemoglobin difference of 0.40g/dl at diagnosis of incomplete miscarriage and Day 7 post treatment and was statistically significant (p=<0.001). The cost of treatment between the two groups was significant (outpatient-RM345 vs inpatient-RM 550). Patients were satisfied with both treatment methods and were keen in recommending the treatment methods to their friends. If a choice was given, patients would prefer outpatient intervention as compared to 21.2% inpatient and 10.6% repeat surgical evacuation as mode of treatment.

Conclusion:
Medical evacuation using intravaginal misoprostol 800mcg 8 hourly for a maximum of 3 doses in an outpatient setting has tolerable side effects, lesser cost and acceptable. It is as efficacious as inpatient administration in treating first trimester incomplete miscarriage.