

## Abstract

# A Comparison of Manual Vacuum Aspiration (MVA) and Sharp Curettage (Traditional ERPOC) in the Management of Incomplete Miscarriage in Universiti Kebangsaan Malaysia Medical Centre (UKMMC)

Ferry L, Norzilawati MN

Department of Obstetrics & Gynaecology, Faculty of Medicine, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia.

### Objectives:

To compare the safety, efficacy and acceptability of MVA versus ERPOC in the management of first trimester incomplete miscarriage.

### Methods:

This was a prospective randomized comparative trial conducted over a period of one year. Women with incomplete miscarriage were recruited and randomized to either the Manual Vacuum Aspirator (MVA) group with out-patient management or to the traditional ERPOC group with in-patient management.

### Results:

A total of 240 women agreed to participate with 120 women in MVA group and 120 women in ERPOC group. Women both the MVA and ERPOC groups had similar demographic profile. The success rate achieved by MVA was 97.4%, and ERPOC was 98.3% which was not significantly different. Mean pain score for MVA group during procedure was moderate pain by majority of MVA group patients. However, there was no significant difference in the pain score fifteen minutes post procedure in both groups. Analgesic usage was significantly higher in the MVA group compared to ERPOC group which was statistically significant. No major complication such as uterine perforation, disseminated intravascular coagulation (DIC) or mortality occurred in the study period. There was also no significant difference in the blood loss and infection rate. The acceptability for MVA with simple analgesia such as mefenamic acid 500mg half an hour before treatment was 54.8%.

In our study setting, the overall cost per procedure taking into consideration the cost to manage complication appeared to be much less was RM 137/procedure for MVA and RM 206/procedure for ERPOC.

### Conclusion:

Manual vacuum aspiration is a safe, simple and effective procedure that should be considered as an alternative to ERPOC in the management of early pregnancy loss. It is a cost effective procedure as it precludes general anaesthesia, operation theatre time and admission. Therefore MVA is a procedure that offers advantages for both the patient and the healthcare system.