Role of endometrial thickness in the assessment of patients after medical and surgical management of spontaneous miscarriage

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Abstract

Miscarriage is the most common complication of pregnancy, 80% of it occurs in the first 12 weeks.

Medical management of abortion is a safe and effective method and considered good alternative to surgery.

Transvaginal sonography is necessary to confirm complete evacuation of the uterus while using the endometrial thickness is confusing.

In spite that the endometrial thickness is greater in medical evacuation than in surgical evacuation but this doesn't mean the need for further surgical intervention.

Key words: **Miscarriage, Misoprostol, Sonography, Endometrial thickness.**

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Glossary of Abbreviations

CVS	Chorionic Villus Sampling
ET	Endometrial Thickness
GA	Gestational Age
GS	Gestational Sac
GSD	Gestational Sac Diameter
MSD	Mean Sac Diameter
MVA	Manual Vacuum Aspiration
PGs	Prostaglandins
RPOC	Retained Products Of Conception
TVS	Transvaginal Sonography
V.B	Vaginal Bleeding

Introduction & Aim of the work

Introduction:-

Spontaneous miscarriage refers to a pregnancy that ends spontaneously before the fetus has reached a viable gestational age. W.H.O defines it as expulsion of an embryo or fetus weighing 500 gram or less, ***(Regan et al; 2000).***

Miscarriage is the most common complication of pregnancy occurring in 10 – 20 % of clinically recognized pregnancies, ***(J.S.Bagrate et al; 2004).***

Miscarriage may be clinically classified into threatened, inevitable, complete, incomplete, missed and septic miscarriage, ***(Togas Tulandi; 2008).***

Medical management with misoprostol is an effective and safe alternative to surgical management, ***(Zhang J et al; 2005).***

Misoprostol has been investigated in the management of miscarriage and often resulting in complete expulsion of the gestational sac in more than 80% of women, ***(Creinin et al; 2004).***

Ultrasound is commonly used to determine if expulsion of the gestational sac has occurred after management with misoprostol. Some investigators have used the endometrial thickness to guide the management, (***Graziosi GC et al; 2004).***

There is no clear understanding exists as to weather or not women who are sonographically diagnosed with incomplete miscarriage or retained products of conception truly need any treatment,***(Creinin et al; 2004)***.

Aim of the work:-

Is to evaluate and compare endometrial thickness in women with incomplete miscarriage who were managed medically and those who were managed surgically after a period of 1 week duration.

Review of Literature

Spontaneous miscarriage is defined as pregnancy that ends spontaneously before the fetus has reached a viable G.A.

The W.H.O defines it as expulsion of an embryo or fetus weighing 500g or less from its mother, this typically corresponds to G.A of 20 to 22 weeks or less, ***(Regan et al; 2000).***

- Miscarriage is the most common complication of pregnancy occurring in 10 -20% of clinically recognized pregnancies, ***(J.S Begrate; 2004).***

- First trimesteric miscarriage affects about 15% of all pregnancies, ***(Weeks and Gemzell; 2006).***

- Eight to 20% of clinically recognized pregnancies under 2 weeks of gestation will undergo spontaneous miscarriage, 80% of them will occur in the first 12 weeks, ***(Wang et al;2003).***

■ *RISK FACTORS:-*

1- **Age:** advancing maternal age is the most important risk factor for spontaneous miscarriage in healthy women the overall rate of spontaneous miscarriage was 11% and the approximate frequencies of clinically recognized miscarriages according to maternal age were; age 20-30 years 9-17%, age 30-35 years 20%, age 35-40 years 40% and age 45 years 80%, ***(Nybo Andessen et al; 2000).***

2- **Previous spontaneous miscarriage:** the risk of miscarriage is about 20% after one miscarriage, 28% after 2 consecutive miscarriages and 43% after 3 or more consecutive miscarriages, ***(Regan et al;1989).***

3- **Smoking:** heavy smoking greater than 10 cigarettes per day is associated with increased risk of pregnancy loss, relative risk 1.2 to 3.4%, ***(Ness et al;1999).***

4- **Alcohol consumption:** Alcohol consumption is associated with an increased rate of miscarriage. One study reports an increase in the first trimester miscarriage with alcohol consumption of more than five units a week, although no increase in second trimester losses, ***(RCOG Guidelines Statement No. 5; 2006)***