

## INTRODUCTION

Misoprostol is a synthetic prostaglandin E1 analogue (15 deoxy -16 hydroxy methyl PGE1) manufactured by Searle pharmaceuticals (Skokie, Illinois, USA). Despite that misoprostol was manufactured only for treatment of gastric problems previously, it has gained a wide popularity for use as a very successful agent for induction of labour, abortion and prevention of postpartum haemorrhage (*Wing, 1999 and Surbeck et al., 1999*).

These indications were based on the powerful myometrial stimulating properties of this drugs. Additional advantages of this agent are the stability at room temperature and its absorption effectively through oral, vaginal and rectal routes (*El Makhazangi et al., 2003*).

Moreover, the complex actions of prostaglandins on the haemostatic system may also have a beneficial role in this Menorrhagia treatment.

Menorrhagia (excessive menstrual flow) is a common complaint of women in the reproductive age, with a world-wide prevalence of 19% (*Amos et al., 1998*). This disorder often exists in the absence of organic lesions and in such cases it is included under the term of dysfunctional uterine bleeding (D.U.B.) (*Clark et al., 1995*). Menorrhagia is defined subjectively as excessive, or prolonged loss of blood on a regular cyclical basis or objectively as menstrual blood loss of  $\geq 80$  ml for the whole menstrual period (*Higham et al., 1990*). The precise cause of D.U.B. is thought to lie at the level of the endometrium itself (*Campbell &*

*Cameron, 1998*). Haemostasis during menstruation is achieved primarily by vasoconstriction, until the bleeding is finally checked by repair of the endometrial blood vessels in the first 7 days of the bleeding.

A number of factors are thought to be involved in the local control of menstrual blood loss. Abnormalities in the prostaglandin and fibrinolytic systems in the endometrium have led to a rational medical approach to the treatment of menorrhagia in some women (*Cameron & Norman, 1995*). One of the major problems confronting all clinicians is how to quantify the amount of menstrual blood loss which a women experiences. Simple non – laboratory methods such as tampon and pad counting and weighing of such blood stained material have been used (*Cole et al., 1971*).

The present study was therefore planned with the objective of evaluating whether these biological properties can be applied for the treatment of D.U.B.