## **INTRODUCTION**

About 30 million abortions are performed world wide each year (Henshaw, 1990) so the safety of the procedure is therefore of global public health importance (El Refaey et al, 1995).

Midtrimester medical methods require further refinment in order to reduce the associated psychological and physical distress (Hinshaw et al, 1995)

Recently, Dilapan - synthetic dilator was found useful for cervical ripening before the second trimester abortion, Dilapan is composed of hydrophilic polyacrylonitrile which absorbs moisture through hygroscopic action drawing fluid from the cervical stroma with a resultant softening of the canal (*Blumenthal*, 1988). As the dilators absorb fluid, intracervical expansion also causes mechanical dilatation and may encourage the synthesis of endogenous prostaglandins (*Kazzi et al*, 1982).

Platz-christensen et al (1995) stated that there is a tendency towards a better dilatation with the hygroscopic tent (Dilapan) than the vaginal administration of prostaglandin and there is a less need for further dilatation, also these tents have been shown to decrease the risk of pelvic inflammatory disease following legal abortion.

The most recent cervical ripening compound tested for induction of labour and abortion is a prostaglandin E<sub>1</sub>, analogue misoprostol (15 deoxy - 16 hydroxy methyl PG E<sub>1</sub>) which is manufactured for treatment of peptic ulcer and marketed under the trade name (Cytotec). The first indication

for its powerful uterotonic properties came from Latin America when it was utilized to terminate pregnancy (Toppozada et al, 1997).

Prostaglandin  $E_1$  analogue is inexpensive and easy to be used because it is placed in the vagina not the cervix (Sanchez - Ramos et al, 1993).

The first attempts to use misoprostol as an oxytocic agent were aimed at termination of early pregnancy. The doses used for this purpose were adminstered vaginally (4-16 tablets) or a combined regimen of the oral (two tablets) plus vaginal (two tablets) route (Coelho et al, 1991, Barbosa and Arilha, 1993).

The effect was further enhanced by treatment with the antiprogestin mifepristone (*Norman et al, 1991*).