

# ABSTRACT

**Introduction:** In the absence of a favourable cervix, trans-cervical Foley catheter have been shown to be effective for preinduction cervical ripening

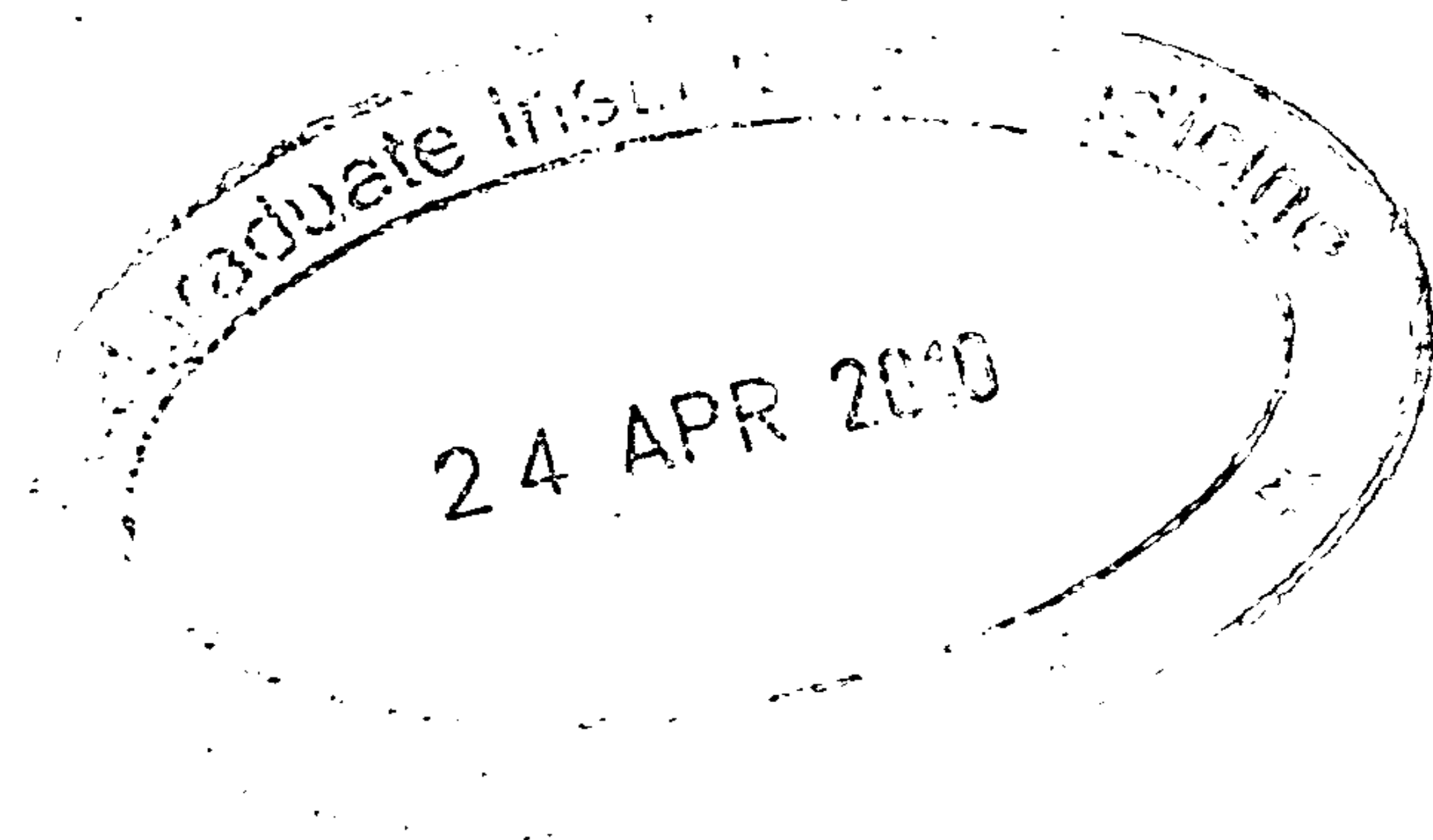
**Objective:** To compare the efficacy and safety of cervical ripening in term singleton pregnancies with use of 40 ml and 80 ml of Foley catheter balloon volumes.

**Design:** A double blind randomized controlled trial

**Setting:** Professorial Unit, De Soysa Hospital for Women, Colombo and ward no 2 Sri Jayawardenapura General Hospital between 1<sup>st</sup> of April 2008 and 1<sup>st</sup> of March 2009.

**Method:** Two hundred women with term singleton pregnancies with a modified Bishop's score < 6 were allocated by stratified block randomisation to 40 ml and 80 ml of Foley catheter balloon inflation volumes respectively.

**Main out come measures:** Vaginal delivery rate, caesarean section rate, change of Bishop's score, induction to delivery interval, failed induction rate, immediate neonatal complications, maternal complications and maternal discomfort or pain.



**Results:** Cervical ripening with Foley catheter inflation volume of 80ml was associated with higher rate of vaginal delivery (73% vs 58%,  $P < 0.05$  ), lower rate of caesarean section (22% vs 36%,  $P < 0.05$ ), greater change of Bishop's score, higher rate of spontaneous onset of labour (33% vs 20%,  $P < 0.05$  ) with quicker entry in to active phase (13.30hrs vs 15.11 hrs,  $P < 0.05$  ), less use of oxytocin (75% vs 87%,  $P < 0.05$  ), lower failed induction rate (9% vs 20%,  $P < 0.05$  ) and higher rate of entry to active labour (90% vs 76%,  $p < 0.05$  ) with no change in adverse foetal or maternal outcome.

**Conclusion:** Ripening of the unfavourable cervix with Foley catheter balloon inflated with 80ml provided more effective ripening, lower rate of caesarean section higher rate of spontaneous onset of labour with faster entry in to active phase, lower use of oxytocin and lower failed induction rate with no change in adverse foetal or maternal outcome.