Transcervical balloon use for cervical ripening associated with a reduced rate of after-hours delivery compared to vaginal prostaglandins in a regional hospital.

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Introduction:

Induction of labour occurs when risk of continuing a pregnancy outweighs risks of inducing labour. Cervical ripening with vaginal prostaglandin-E2 or transcervical ballooning prior to induction is common practice but evidence of efficacy is limited to tertiary settings.

Aims:

To compare perinatal outcomes (including time of birth) in women who underwent cervical ripening by vaginal prostaglandin-E2 (PGE_2) or transcervical ballooning (CRB) in a regional hospital that introduced the balloon method almost exclusively in 2014

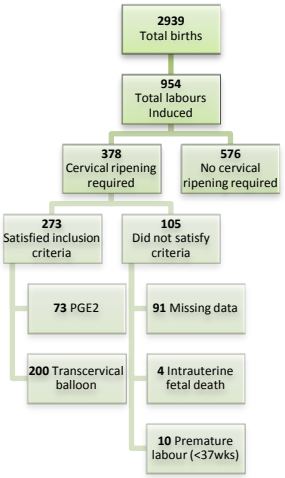
Method:

Retrospective data collected from Birthing Outcomes System (BOS©) at a Victorian regional hospital, 2012–2016, inclusively.

Inclusion: Live foetus, singleton, cephalic, term (³37 weeks), transcervical balloons or prostaglandin-E2.

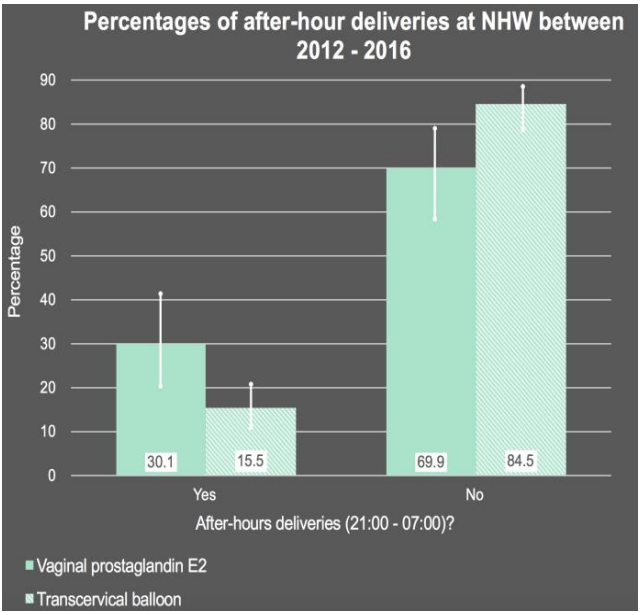
Exclusion: Artificially ruptured membranes or syntocinon only (non-cervical ripening), gestation <37 weeks, intrauterine foetal deaths or abnormalities.

Analysis: Descriptive and inferential statistics to calculate differences between subgroups.



Results:

- Overall induction rate was 32.5%.
- 60% (n=576) did not meet inclusion criteria.
- Maternal characteristics were homogenous between both groups.
- The final dataset included 273 women: 73 and 200 were induced with PGE_2 and CRB, respectively



- No significant differences were detected between induction mode and maternal and perinatal outcomes.
- After-hours births (between 21:00–07:00) were more frequent in the PGE_2 (29.7%) than the CRB (15.3%) ($p<0.007$).

Discussion:

Comparable outcomes between induction methods corresponds with the literature. The hospital is a sub-regional centre that supports many local hospitals that only provide low risk care. The high rate of inductions overall in our setting could be explained by patients of high risk with medical indications for induction being referred away from these smaller centres. The higher rate of after-hours births for the prostaglandin-E2 group is important as access to staff and services is limited during these hours.