Appendix 5 - Transcervical Catheter

The use of transcervical catheters for cervical ripening prior to induction of labour (IOL) has been shown to be efficient, safe, cost effective and is associated with a low incidence of uterine contractile abnormalities compared to prostaglandins. The value of mechanical methods of inducing labour in women with an unfavourable cervix is inconclusive, but is an option for cervical ripening when there are contraindications to pharmacological agents, especially for those women attempting a vaginal birth after a caesarean (VBAC).

Transcervical Catheter: is a mechanical device consisting of fluid filled catheter balloon(s) that provide local endocervical pressure, stimulating the release of prostaglandins order to soften and efface the cervix, making it favourable for induction of labour.

The fluid filled catheter balloon(s) provide local endocervical pressure that stimulates the release of prostaglandins. This in turn, softens and effaces the cervix, making it favourable for IOL. Cervical Ripening Balloon Catheter is used.

Risks of this method of induction include infection, placental abruption, uterine rupture (very unlikely), rupture of membranes, device entanglement, maternal discomfort, failed dilatation, cervical laceration and bleeding.

Equipment

INSERTION OF CERVICAL RIPENING BALLOON

- Large bi-valve speculum
- Sponge forceps
- Aqueous chlorhexidine
- Cervical Ripening Balloon
- 200ml normal saline
- 20ml Luer-lock syringe

INSERTION OF CERVICAL RIPENING BALLOON

- Informed consent must be obtained from the woman and documented in the medical record.
- Initial assessment must include a reassuring CTG and vaginal examination must reveal that the Bishop Score is 6 or less.
- Cleanse the vulvar-vaginal area.
- Insert the speculum and visualise the cervix.
- Pass the cervical ripening balloon through the cervix using the sponge forceps and advance both balloons have entered the cervical canal.
- Inflate the uterine balloon with 40ml of normal saline using a 20ml Luer-lock syringe through the Check Flo valve marked "U".
- Once the uterine balloon is inflated, gently pull the device back until the uterine balloon is
against the internal so.

- The vaginal balloon is now visible outside the external cervical so. Inflate the vaginal balloon with 20ml normal saline using a standard 20ml Luer-lock syringe through the green Check-Flo valve marked "V."
- Once the balloons are situated on each side of the cervix and the device has been fixed place, remove the bivalve speculum.
- Add more fluid to each balloon in turn, in 20ml increments until each balloon contains 80ml (maximum) of fluid (NOTE: Do not over-inflate the balloons).
- Tape the catheter to the inner aspect of the woman's thigh.
- On completion of the procedure assess maternal observations, fetal heart rate and obtain CTG to assess maternal and fetal wellbeing.

MANAGEMENT AFTER INSERTION

Management for both catheters is as follows:

- The procedure must be performed in labour ward.
- If the woman has an uncomplicated pregnancy she is considered safe for transfer to an inpatient bed 1 hour after catheter insertion if both maternal and fetal observations are normal.
- A vaginal examination is done at 12 and 18 hours post Foley catheter insertion, to ensure that the catheter balloon is not sitting in the vagina. The catheter may remain inside for 18-24 hours before medical review for removal, ARM or for the use of Prostaglandin E2 (PGE2) Vaginal Gel (Prostin). It is recommended that the cervical ripening balloon be removed after 15 hours.
- If at any time the membranes rupture, the woman is transferred to Labour Ward for assessment and review.
- If the catheter falls out prior to 12 hours post insertion a vaginal examination should be performed. If the cervix is still unfavourable, medical staff must review re further management of use of Prostaglandin E2 (PGE2) Vaginal Gel (Prostin).

Observations:

- 4 hourly fetal heart rate and movements- commence a CTG if any fetal heart rate abnormalities are detected.
- 4 hourly uterine activity, vaginal loss, pulse and blood pressure.
- Assess and record any systemic effects (e.g. nausea, vomiting).

Indications for catheter removal include:

- Ruptured membranes
- Uterine hyperstimulation or uterine tachystole
- Abnormal CTG requiring urgent delivery
- Urinary retention- remove some or all fluid from the balloon(s)
- Maximum recommended time reached

Method of removal: Deflate device balloon(s) and remove catheter gently.