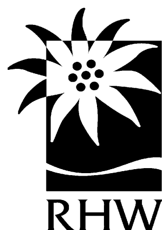


ROYAL HOSPITAL FOR WOMEN

LOCAL OPERATING PROCEDURE

CLINICAL POLICIES, PROCEDURES & GUIDELINES

Approved by Quality & Patient Safety Committee
20/6/13

BALLOON PLACEMENT FOR UTERINE TAMPONADE

1. OPTIMAL OUTCOMES
- Appropriate use and management of Cook-Bakri Uterine Tamponade Balloon to control uterine bleeding using an aseptic technique.

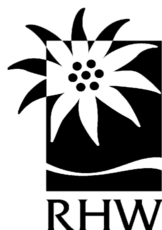
2. PATIENT
- Woman who requires advanced management of ongoing post-partum bleeding of placental bed or partial uterine atony

3. STAFF
- Registered Midwives
- Medical Staff
- Registered Nurses

4. EQUIPMENT
- Cook-Bakri Uterine Tamponade Balloon
- Spigot
- Drainage Bag
- Normal Saline 500 mls
- Urinary Catheter
- Vaginal packing gauze

5. CLINICAL PRACTICE
- **Vaginal Delivery – Transvaginal Placement**
  - Place a Foley catheter in patient's bladder to collect and monitor urine output hourly.
  - Determine uterus is clear of any retained placental fragments, arterial bleeding, or lacerations.
  - Insert the balloon portion of the catheter in the uterus, making certain that the entire balloon is inserted past the cervical canal and internal ostium.
  - Avoid excessive force when inserting the balloon into the uterus.

- **Caesarean Delivery – Transabdominal Placement**
  - Determine uterus is clear of any retained placental fragments, arterial bleeding, or lacerations.
  - Determine the appropriate rout of insertion according to clinical circumstances.
  - Pass the Tamponade Balloon via the cesarean section incision, inflation port first, through the uterus and cervix.
  - Pass the Tamponade balloon through the vagina and cervis into the uterus.
  - Have an assistant pull the shaft of the balloon through the vaginal canal until the deflated balloon base comes into contact with the internal cervical ostium.
  - Close the incision as per normal procedure prior to balloon inflation taking care to avoid puncturing the balloon while suturing.
  - Deflate, reposition, and reinflate if balloon becomes dislodged due to shaft tension and cervical dilation. Use of vaginal packing may be indicated at that time to aid in balloon placement.



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BALLOON PLACEMENT FOR UTERINE TAMPONADE cont'd

- **Instructions for Balloon Inflation**
  - Measure 500 ml of normal saline into a jug.
  - Fill the balloon to the required volume using the enclosed syringe.
  - Do not over inflate the balloon, maximum volume 500 ml.
  - Apply gentle traction to the balloon shaft to ensure proper contact between the balloon and tissue surface. To maintain tension, secure the balloon shaft to the patient's leg.
  - Ensure maintenance of correct placement of balloon and maximize tamponade effect, by packing the vagina where necessary with iodine or obstetric cream-soaked vaginal gauze at this time.

- **Patient Monitoring**
  - Connect the drainage port to a fluid collection bag to monitor hemostasis or spigot drainage according to clinical situation.
  - Monitor continuously for signs of increased bleeding, uterine rupture, or deteriorating condition.

- **Balloon Removal**
  - Remove Catheter within twenty-four (24) hours of placement or as indicated
  - Remove tension from balloon shaft
  - Remove any vaginal packing
  - Aspirate the contents of the balloon until fully deflated
  - Gently retract the balloon from the uterus and vaginal canal and discard
  - Continue to monitor the patient for signs of uterine bleeding

6. HAZARDS / SUB-OPTIMAL OUTCOMES
- Perforation of the uterine wall
- Inappropriate use of Bakri Balloon
- Over inflation
- Delay in performing required hysterectomy
- Puncturing of balloon whilst suturing at Cesarean Section
- Infection

7. DOCUMENTATION
- Integrated Notes
- Operation Report
- ObstetriX

8. EDUCATIONAL NOTES
- The Bakri Balloon is 100% silicone (no latex), and has a ductile shape which allows it to conform to the uterine anatomy. It allows for haemostatic cushion application, and limits clot adhesion. The large diameter lumen in the shaft and multi-ported, non-abrasive tip allows for constant drainage, so an ongoing uterine hemorrhage does not go undetected post-application.
- Its pull-strength allows for the application of up to 500g of tension to aid tamponade achievement.
- Once deflated the Bakri Balloon is easily removed transvaginally without the need for an additional surgical procedure.

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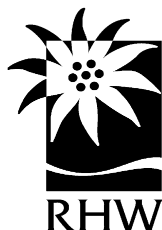

BALLOON PLACEMENT FOR UTERINE TAMPONADE cont'd

The use of Bakri Balloon is contraindicated in the presence of :

- Arterial bleeding requiring surgical exploration or angiographic embolisation
- Complete uterine atony bleeding, although it may be effective in partial atony
- Cases indicating hysterectomy
- Pregnancy
- Cervical cancer
- Purulent infections of the vagina, cervix, or uterus
- Untreated uterine anomaly
- Disseminated intravascular coagulation
- A surgical site which would prohibit the device from effectively controlling bleeding

9. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE GUIDELINES

- Post Partum Haemorrhage - Prevention and Management
- Catheterisation
- Aseptic Technique

10. REFERENCES

1 Bakri YN, et al. Tamponade-balloon for obstetrical bleeding. Int. J. Gynecol. Obstet. 2001; 74: 139-142.

2 www.med.umich.edu/obgyn/resdir/protocols/sos**bakri**.pdf

REVISION & APPROVAL HISTORY

Amendment due to RCA recommendation June 2015 (page 1 Clinical Practice, Caesarean Delivery)
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