HEALTH HOLDING
HAFER ALBATIN HEALTH CLUSTER
MATERNITY AND CHILDREN HOSPITAL

| | | | |
|---|---|---|---|
| **Department:** | Obstetrics and Gynecology | | |
| **Document:** | Multidisciplinary Policy and Procedure | | |
| **Title:** | Emergency Hysterectomy | | |
| **Applies To:** | All Obstetrics and Gynecology Staff | | |
| **Preparation Date:** | January 08, 2025 | **Index No:** | L&D-MPP-006 |
| **Approval Date:** | January 22, 2025 | **Version :** | 2 |
| **Effective Date:** | February 22, 2025 | **Replacement No.:** | L&D-MPP-006(1) |
| **Review Date:** | February 22, 2028 | **No. of Pages:** | 13 |

## 1. PURPOSE:

1.1 To standardize the health care provided for this high risk group of patients.

## 2. DEFINITIONS:

2.1 **Hysterectomy**– is an operation to remove a woman's uterus.

## 3. POLICY:

3.1 In cases where emergency hysterectomy is anticipated (e.g. cases of placenta accrete, major degree placenta previa with repeated caesarean section,etc) a consent for hysterectomy should be obtained from the patient and her husband before the operation.

3.2 In unforeseen circumstances where is a need to do hysterectomy and there is no consent from the patient the following steps should be followed:

- 3.2.1 If there is enough time, the husband should be called immediately to sign the consent. However this should not be an obstacle at all to delay the decision for hysterectomy.
- 3.2.2 If the need for hysterectomy is urgent to save the mothers' life, an urgent committee will decide upon the need for hysterectomy.
  - 3.2.2.1 The committee consists of two physician and head of the department.
  - 3.2.2.2 The treating physician will call a second physician who will come to OR immediately (if he/ she lives within hospital premises) or will give his/ her opinion by phone if he lives far away from the hospital.
- 3.2.3 All efforts should be made to try conservative.
- 3.2.4 Surgical techniques in order to avoid hysterectomy.
- 3.2.5 Repair of uterine lacerations.
- 3.2.6 Bilateral uterine artery ligation.
- 3.2.7 Internal iliac ligation.
- 3.2.8 Bilateral mass compression of the lower segment.
- 3.2.9 Modified B–lynch suture.

3.3 The anesthetist to be called to attend the operation and his/ her opinion should be respected regarding blood loss the general condition of the patient and the urgency to do hysterectomy.

3.4 Subtotal hysterectomy is the standard operation, however total hysterectomy may be indicated in situations where bleeding will be controlled after excision of the cervix.

- 3.4.1 Placenta previa, accrete, increta and percreta.
- 3.4.2 Extensive cervical tears.

3.5 Both ovaries should be preserved.

3.6 The whole procedure should be explained to the patient and her husband next day.

3.7 Full documentation in the file and operation notes is essential as it has major medico–legal implications.

3.8 Prepare 2–3 liters of whole blood if available if not packed red blood cells.

3.9 Give a single dose of prophylactic antibiotics.

3.9.1 Ampicillin 2 grams IV or;
3.9.2 Cefazolin 1 gram IV

## 4. PROCEDURE:

4.1 If patient is not already in operating room.
- 4.1.1 Physician will call operation room.
- 4.1.2 The nurse will call operation room nurse and bring trolley for transferring patient.
- 4.1.3 Another nurse will fix urinary catheter and give pre-operative medications.
- 4.1.4 The anesthetist should be informed by physician and explain the situation by phone.
- 4.1.5 The patient to be shifted to the operation room as soon as possible.

4.2 Start the operation:
- 4.2.1 After general anesthesia is induced, the surgeon or assistant cleans the abdomen of the patient then sterile drapingare applied.
- 4.2.2 Make a midline vertical incision below the umbilicus to the pubic hair, through the skin and to the level of the fascia.
- 4.2.3 Make a 2-3 cm vertical incision in the fascia.
- 4.2.4 Hold the fascial edge with forceps and lengthen the incision up and down using scissors.
- 4.2.5 Use fingers or scissors to separate the rectus muscles (abdominal wall muscles).
- 4.2.6 Use fingers to make an opening in the peritoneum near the umbilicus. Use scissors to lengthen the incisions up and down in order to see the entire uterus. Carefully, to prevent bladder injury, use scissors to separate layers and open the lower part of the peritoneum.
- 4.2.7 Place a bladder retractor over the pubic bone and place self-retaining abdominal retractors.
- 4.2.8 If the delivery was by caesarean section, clamp the sites of bleeding along the uterine incision.
- 4.2.9 In case of massive bleeding, have an assistant press fingers over the aorta in the lower abdomen. This will reduce intraperitoneal bleeding.
- 4.2.10 Extend the skin incision, if needed.

4.3 Subtotal (supracervical) Hysterectomy
- 4.3.1 Lift the uterus out of the abdomen and gently pull to maintain traction.
- 4.3.2 Doubly clamp and cut the round ligaments with scissors, clamp and cut the pedicles, but ligate after the uterine arteries are secured to save time.
- 4.3.3 From the edge of the cut round ligament, open the anterior leaf of the broad ligament. Incise to:
  - 4.3.3.1 The point where the bladder peritoneum is reflected onto the lower uterine surface in the midline.
  - 4.3.3.2 The incised peritoneum at a caesarean section.
- 4.3.4 Use two fingers to push the posterior leaf of the broad ligament forward, just under the tube and ovary, near the uterine edge. Make a hole the size of a finger in the broad ligament and the broad ligament, using scissors. Doubly clamp and cut the tube, the ovarian ligament and the broad ligament through the hole in the brad ligament. The ureters are close to the uterine vessels. The ureter must be identified and exposed to avoid injuring it during surgery or including it in a stitch.
- 4.3.5 Divide the posterior leaf of the broad ligament downwards towards the uterosacral ligaments, using scissor
- 4.3.6 Grasp the edge of the bladder flap with forceps or a small clamp. Using fingers or scissors, dissect the bladder downward but inwards toward the cervix and the lower uterine segment.
- 4.3.7 Locate the uterine artery and vein on each side of the uterus. Feel for the junction of the uterus and cervix.
- 4.3.8 Doubly clamp across the uterine vessels at a 90 degree angle on each side of the cervix. Cut and doubly ligate with 0 chromic catgut (or vicryl) suture.
- 4.3.9 Observe carefully for any further bleeding. If the uterine arteries are ligated correctly, bleeding should stop and the uterus should look pale.
- 4.3.10 Return to the clamped pedicles of the round ligaments and tubo-ovarian ligaments and ligate them with 0 chromic catgut (or vicryl) suture.
- 4.3.11 Amputate the uterus above the level where the uterine arteries are ligated, using scissors.
- 4.3.12 Close the cervical stump with interrupted 2-0 or 3-0 chromic catgut (or vicryl) sutures.

4.3.13 Carefully inspect the cervical stump, leaves of the broad ligament and other pelvic floor structures for any bleeding.

4.3.14 If slight bleeding persists or a clotting disorder is suspected, place a drain through the abdominal wall. Do not place a drain through the cervical stump as this can cause postoperative infection.

4.3.15 Ensure that there is no bleeding. Remove clots using a sponge.

4.3.16 In all cases, check for injury to the bladder. If the bladder injury is identified, repair the injury or call urologist if large tear or no experience.

4.3.18 Close the fascia with continuous suture or nylon if previous scar.

4.3.18.1 There is no need to close the bladder peritoneum or the abdominal peritoneum.

4.3.19 If there are signs of infection, pack the subcutaneous tissue with gauze and place lose 0 catgut (or vicryl) sutures. Close the skin with a delayed closure after the infection has cleared.

4.3.20 If there are no signs of infection, close the skin with vertical mattress sutures of 3–0 nylon (or silk) and apply a sterile dressing.

4.4 Total Hysterectomy the following additional steps are required for total hysterectomy after ligating of round ligament and tuboovarian ligaments.

4.4.1 Push the bladder down to free the top 2 cm of the vagina.

4.4.2 Open the posterior leaf of the broad ligament.

4.4.3 Clamp, ligate and cut the uterosacral ligaments.

4.4.4 Clamp, ligate and cut the cardinal ligaments, which contain the descending branches of the uterine vessels. This is the critical step in the operation:

4.4.4.1 Grasp the ligament vertically with a largetoothed clamp (e.g. kocher)

4.4.4.2 Place the clamp 5 mm lateral to the cervix and cut the ligament close to the cervix, leaving a stump medial to the clamp for safety;

4.4.4.3 If the cervix is long, repeat the step two or three times as needed. The upper 2 cm of the vagina should now be free of attachments.

4.4.5 Circumcise the vagina as near to the cervix as possible, clamping bleeding points as they appear.

4.4.6 Place hemostatic angle sutures, which include round, cardinal and uterosacral ligaments.

4.4.7 Place continuous sutures on the vaginal cuff to stop hemorrhage.

4.4.8 Close the abdomen (as above) after placing a drain in the extra peritoneal space near the stump of the cervix.

4.4.9 Apply wound dressing.

4.5 Document the procedure properly in the medical records of the patient. This should include:

4.5.1 Detailed and accurate description of the events which led to the decision of hysterectomy.

4.5.2 The condition of the patient pre intra and post–operative (vital signs, bleeding severity and clotting status, urine color and volume , amount of blood, its products and fluids given).

4.5.3 Description of the operation notes with clear name, signature and stamp of operator.

4.5.4 Post–operative care includes:

4.5.4.1 Transfer to ICU.

4.5.4.2 Blood transfusion and IV fluids.

4.5.4.3 Antibiotics.

4.5.4.3.1 If there are signs of infection or the woman currently has fever, give a combination of antibiotics until she is feverfree for 48 hours.

4.5.4.3.2 Ampicillin 2g IV every 6 hours.

4.5.4.3.3 Plus Gentamycin 5mg/kg body weight IV every 24 hours.

4.5.4.3.4 Plus Metronidazole 500mg IV every 8 hours.

4.5.4.4 Observation of vital signs.

4.5.4.5 Observation of bleeding.

4.5.4.6 Observation of fluid input and output.Review P&P of preoperative assessment and post–operative care.

4.5.5 Give appropriate analgesic drugs.

4.5.6 If there are no signs of infection, remove the abdominal drain after 48 hours.

4.5.7 Offer other health services, if possible.

## 5. MATERIALS AND EQUIPMENT:

N/A

## 6. RESPONSIBILITIES:

6.1 Head of OB–Gyne Department
6.2 Physician
6.3 Nurse

## 7. APPENDICES:

7.1 General Consent Form
7.2 Pre–Anesthesia/ Sedation Assessment Form
7.3 Anesthesia/ Sedation Consent
7.4 Surgical Safety Checklist
7.5 Surgical/ Medical Interventional Procedure
7.6 OR Notes

## 8. REFERENCES:


8.1 MCPC, Managing Complications in Pregnancy and Childbirth, Section 3 Procedure Postpartum hysterectomy. A guide for midwives and doctors, WHO, 2003.

8.2 Anonymous diagnosis and management of postpartum hemorrhage, ACOG technical bulletin number 143, International Journal of Gynecology and Obstetrics 1991, 36:159-163.
Up to date April 2012.

8.3 CBAHI Standard 3rd Edition 2016.

8.4 MOH, Guidelines for Obstetrics and Gynecology, Clinical Policies and Procedures

## 9. APPROVALS:

| | Name | Title | Signature | Date |
|---|---|---|---|---|
| **Prepared by:** | Dr. Abdalla Mohamed Albasha | Obstetrician and Gynecologist | | January 08, 2025 |
| **Reviewed by:** | Dr. Mohannad Yaghmour | Head of the Department | | January 12, 2025 |
| **Reviewed by:** | Ms. Awatif Hamoud Al - Harbi | IPCD Director | | January 12, 2025 |
| **Reviewed by:** | Mr. Sabah Turayhib Al - Harbi | Director of Nursing | | January 13, 2025 |
| **Reviewed by:** | Mr. Abduleah Ayed Al - Mutairi | QM&PS Director | | January 14, 2025 |
| **Reviewed by:** | Dr. Thamer Naguib | Medical Director | | January 15, 2025 |
| **Approved by:** | Mr. Fahad Hezam Al - Shammari | Hospital Director | | January 22, 2025 |