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Ministry of Health

Directorate General of Khoula Hospital

Directorate of Obestetric&Gynecology

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Approval Process

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Contents Table:

Acronyms:

LSCS	Lower Segment Caesarean Section
SCBU	Special Care Baby Unit
TOLAC	Trial Of Labor After Caesarean
VBAC	Vaginal Birth After Caesarean
CTG	Cardio TocoGraph
ANC	Antenatal card
FSE	Fetal Scalp Electrode
VE	Vaginal Examination
IOL	Induction Of Labor
SROM/ ARM	Spontaneous Rupture Of Membrane/ Artificial Rupture of Membrane
CBC	Complete Blood Count
APH/ PPH	Ante Partum Hemorrhage/ Postpartum Hemorrhage
RFT/ LFT	Renal Function Test/ Liver Function Test
NPO	Nil Per Oral
RTA	Road traffic accident
e.g.	For example
IV	Intravenous

Rupture Uterus Management Guideline

1. Introduction

Uterine rupture is a rare but catastrophic obstetric complication. It can lead to serious squeal for both mother and baby such as hemorrhaging shock, need for peripartum hysterectomy, neonatal asphyxia, hypoxic ischemic encephalopathy or even neonatal or maternal death.

2. Scope:

This guideline is applying to all doctors and nurses in Obstetrics and Gynecology Department working at DGKH, for effective management for clients with uterine rupture.

2. Purpose

The purpose of this guideline is to standardize the management of rupture uterus and minimizing the morbidity and mortality associated with this condition.

3. Definitions

3.1 **Uterine Rupture** refers to a full thickness disruption of the uterine muscle and overlying serosa. It typically occurs during labor and can extend to affect the bladder and/or broad ligament.

3.2 **Incomplete rupture/ dehiscence/ uterine window**- involve the myometrium but not the pelvic peritoneum.

4. Guidelines:

4.1 **risk factor which should identify by treat team during antenatal period as the following;**

4.1.2 Scarred uterus.

4.1.3 Caesarean section, myomectomy, previous perforation, Classical scar and previous LSCS scar thickness of less than 2 mm carries high risk.

4.1.4 Grandmultiparity

4.1.5 Placenta percreta or increta

4.1.6 Cephalo-pelvic disproportion, macrosomia, malpresentation

4.1.7 Multiple pregnancies

4.1.8 Trauma e.g. RTA

4.1.9 Injudicious use of oxytocin & prostaglandin in client with high parity or uterine scar

4.1.10 Obstructed labor

4.1.12 Difficult forceps delivery

4.1.13 Post maturity

4.1.14 Congenital uterine anomalies

4.1.15 Intrauterine manipulations –like internal podalicversion.

4.2 Antenatal management for clients with risk factors for uterine ruptures as the following:

4.2.1 To follow guidelines while counseling client with previous caesarean sections

4.2.2 TOLAC should be avoided with two or more previous C-sections, previous classical C-sections, previous low vertical or J-shaped incision, previous C-section with congenitally abnormal uterus, previous C-section with macrosomia previous myomectomy.

4.2.3 Previous section requiring IOL or augmentation should be carried out with consultants' opinion

4.2.4 Careful consideration should be given before IOL in cases of short inter delivery interval (less than 12 months) needs clarification.

4.2.5 Foleys catheter induction is favored in cases of previous one caesarean section and if not set into labour after 24 hours.

4.2.6 reduced dose of IOL medication e.g. (Prostin E2) if used in selected cases

4.2.7 Documentation regarding counselling in the alshifa and ANC card.

5.3 Management for clients with risk factors during Labor and Delivery:

5.3.1 The client with risk factors, labor should not be prolonged, especially in the 2nd stage.

5.3.2 All Blood should be sent for full blood count RFT/LFT, coagulation. Blood should be cross matched. IV access should be made

5.3.3 Continuous electronic fetal monitoring should be carried out

5.3.4. Augmentation of labor with oxytocin must be considered, only after discussion with the consultant and stopped if non reassuring CTG.

5.3.5 Pre monitory signs (Before Rupture):

a Maternal tachycardia

b Persistent scar pain / tenderness between contractions

c No reassuring /pathological CTG

5.3.6 **Monitor the Signs of Rupture as the following:**

a Prolonged deceleration or fetal bradycardia

b Sudden severe abdominal pain

c Decrease/cessation of uterine contractions

d Haematuria

e Vaginal bleeding

f Peritoneal irritation (shoulder tip pain)

g Abnormal fetal lie (fetal parts palpable superficial)

h Retraction of presenting part (goes to high station than before)

i Maternal shock (rising pulse, falling BP, sweating, low SPO2)

j Ultrasound elicits abnormal fetal lie or presentation, haemoperitoneum, breech of uterine wall contour .

6.0 Management for client with rupture uterus:

6.1. Time available for successful intervention after frank uterine rupture and before the major fetal morbidity is only 10-37 minutes, therefore if a uterine rupture is suspected the following step should be considered:

6.2.1 Call for help

6.2.2. Stop oxytocin infusion if in use

6.2.3. Assess airway and apply oxygen 15L/per min if needed

6.2.4. Monitor vital signs ((blood pressure, pulse, SPO2, respiration & temperature and record on MEWOWS chart)

6.2.5 Call senior obstetrician, senior midwife, anesthetist and pediatrician

6.2.6 Alert OT and blood bank. If patient is in shock, follow **the massive obstetric hemorrhage protocol**

6.2.7 Two IV access using 14-16 g canulae. Take blood for cross match (4-6 units of blood)

6.2.8 Administer IV fluid such as hartmanns solution at an initial bolus of 20ml/kg. administer further fluids, blood and blood products as required

6.2.9 Catheterize and monitor urine output

6.2.10 inform consent should take for laparotomy and caesarean section with uterine repair SOS hysterectomy/bladder repair

6.2.11. Pfannensteil incision usually employed. However, if fundal rupture is suspected/traumatic /rapid entry into abdomen is warranted, lower midline incision

6.2.12 Patient and relatives must be counseled in detail about diagnosis and possible need for hysterectomy and this should be documented

6.2.12 The delivery midwife should complete a risk event and incident report should be completed within 24 hours

6.2.13 Fetus is delivered by C-section if it was impending rupture, if already ruptured fetus is delivered from the peritoneal cavity and handed over to the neonatologist

6.2.14 after the delivery of fetus, the type of surgical treatment for mother should depend on the flowing factors;

a. Type of uterine rupture

b Degree of hemorrhage

c General condition of the patient

d Desire for future child bearing

7.2.15 Repair of uterus will have considered the following:

a Mother desires for further child bearing

b Low transverse uterine rupture,

c No extension of tear into the broad ligament /para colpos

d Easily controllable uterine hemorrhage,

e Good general condition,

f No clinical/lab evidence of evolving coagulopathy

g Hysterectomy to be considered if intractable hemorrhage or when uterine rupture sites are multiple, longitudinal or low lying

h Insert a drain if necessary

i Thromoprophylaxis

j Antibiotic prophylaxis

k Proper documentation of events

l Description of rupture as well as the surgery undertaken.

m. Debriefing of the event and the procedure done along with the outcome with the patient and her husband /close relative.

8. **Counseling Management for Future Pregnancies:**

8.1 If tubal ligation was not performed at the time of laparotomy, explain the increased risk of rupture with subsequent pregnancies.

8.2 discuss with client the option of permanent contraception. If not willing, should practice contraception at least for 2 years before planning further pregnancy.

8.3 If the defect is confined to the lower segment the risk of rupture in a subsequent pregnancy is similar to that is someone with a previous caesarean section

8.3 If there are extensive tears involving the upper segment, future pregnancy may be contraindicated

8.4 The client with a history of uterine rupture should have a planned elective caesarean section after (34-36 weeks) in the subsequent pregnancy.

9. Responsibilities:

9.1The head of Obstetrics and Gynecology Department shall:

9.1.2Emphasize to the consultants /doctors the importance of following the Rupture Uterus Management Guidelines

9.2The Director of Nursing Affairs shall:

9.2.1 Emphasize to the HoS/Unit Supervisors the importance of following the Rupture Uterus Management Guidelines

9.3 The Unit Supervisor of Maternity and Child Health shall:

9.3.1 Emphasize to all the staff the Rupture Uterus Management Guidelines

9.4 The labour Ward In-Charges/Gyea operation threat incharge /Shift In-charges shall:

9.4.1 Ensure all nurses are adhering to the Rupture Uterus Management Guidelines

9.5 All Midwives /Nurses shall:

9.5.1 Adhere to the Rupture Uterus Management Guidelines

9.5.2 Report any incident related the Rupture Uterus Management Guidelines

9.5.3 Liaise with treating team as needed.

9.6 Treating Doctors shall:

9.6.1 Adhere to the Rupture Uterus Management Guidelines

10. Document History and Version Control

Document History and Version Control			
Version	**Description of Amendment**	**Author**	**Review Date**
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11. Related Documents:

12. References:

Title of book/ journal/ articles/ Website	Author	Year of publication	Page
Intrapartum Care Guideline	NICE	2015	