Reference Number: UHBOBS151 **Version Number:** 3	**Date of Next Review:** *September 2020* **Previous Trust/LHB Reference Number:**

Uterine Inversion Guideline

Introduction and Aim

Is the document supporting a policy?
What will it achieve?

Objectives

- *Please use bulleted list*

Scope

This procedure applies to all of our staff in all locations including those with honorary contracts

Equality Health Impact Assessment	*An Equality Health Impact Assessment (EHIA) has not been completed.*
Documents to read alongside this Procedure	*List all documents the reader is advised to read alongside / in support of this document*
Approved by	*Maternity Professional Forum*

Accountable Executive or Clinical Board Director	*Ruth Walker, Executive Nurse Director*
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Summary of reviews/amendments			
Version Number	**Date of Review Approved**	**Date Published**	**Summary of Amendments**
1	*Feb 2008*	*Feb 2008*	*New Document*
2	Feb 2011	Feb 2011	
3	Feb 2014	Feb 2014	
4	27/11/2017	15/01/2018	Reviewed and updated

Guidelines for the management of post-partum uterine inversion

EVIDENCE:-

Information on this rare condition is based from the course Manual of Medical and Obstetric Emergencies and Trauma MOET[1]. Modifications are made on further evidence in the literature.

DIAGNOSIS

Early recognition of uterine inversion is vital to enable prompt treatment. Symptoms and signs include:

- Severe lower abdominal pain in the third stage.
- Haemorrhage present in 94% of cases.
- Shock that is out of proportion to the blood loss due to increased vagal tone.
- Placenta, may or may not be in situ.
- Uterine fundus not palpable per abdomen (in milder degrees there may be a dimple in the fundal area).
- Pelvic examination showing a mass in the vagina (in milder degrees) or outside the introitus. Plus the cervix often cannot be felt – to differentiate from large fibroid polyp.

P.S. Mismanagement of the 3rd stage of labour, with premature traction on the umbilical cord and/or fundal pressure before the placental separation is frequently an associated factor[3].

MANAGEMENT

1. Call for help (experienced obstetrician, anaesthetist and midwifes).
2. Arrange replacement of uterus (by the Johnson manoeuvre[2]) concurrently to anti-shock measures, as resuscitation may not be successful until the inversion is corrected. Uterine relaxants usually required in the presence of cervical ring i.e. **subcutaneous Terbutaline 0.25 milligrams[4]**.
3. Insert two wide bore cannulas.
4. Collect blood for FBC, coagulation studies and group and cross match (4-6units).
5. Start fluid replacement immediately (colloids and crystalloids).
6. Continuously monitor BP/pulse/respiratory rate/urine output/O_2 saturation.
7. Arrange appropriate analgesia.
8. If uterine replacement is unsuccessful by above measures, transfer to theatre for replacement under GA (GA with halothane may be induced to provide uterine relaxation).
9. Attempt to reposition the uterus; the earlier the restoration, the more likely the success (if the placenta is still attached it should be left alone until after repositioning.
10. Once repositioned consider Syntocinon infusion (40 units in 500ml Normal Saline at 125 ml/hr) to maintain contraction and reduce haemorrhage.

Hydrostatic repositioning (O'Sullivan's technique)

Uterine rupture must be excluded first.

Infuse warm saline into the vagina (via a rubber tube held 1-2 metres above the patient) while the vaginal orifice is blocked by an assistant.

Another technique involves attaching the intravenous giving set to a silicone ventouse cup inserted in the vagina, which tends to produce a better seal.

Surgery (laparotomy and Haultan's procedure or Huntingdon's operation)
Surgery is only used if all other attempts fail.

In the Huntingdon's procedure, Allis forceps are placed within the dimple of the inverted uterus and gentle upward traction is exerted on the clamps, with a further placement of forceps on the advancing fundus.

Haultain's technique involves incising the cervical ring posteriorly with a longitudinal incision and facilitates uterine placement by Huntingdon's method.

Oxytocics should be administered after repositioning to keep the uterus contracted and prevent recurrence. The attendant's hand should remain in the uterine cavity until a firm contraction occurs.

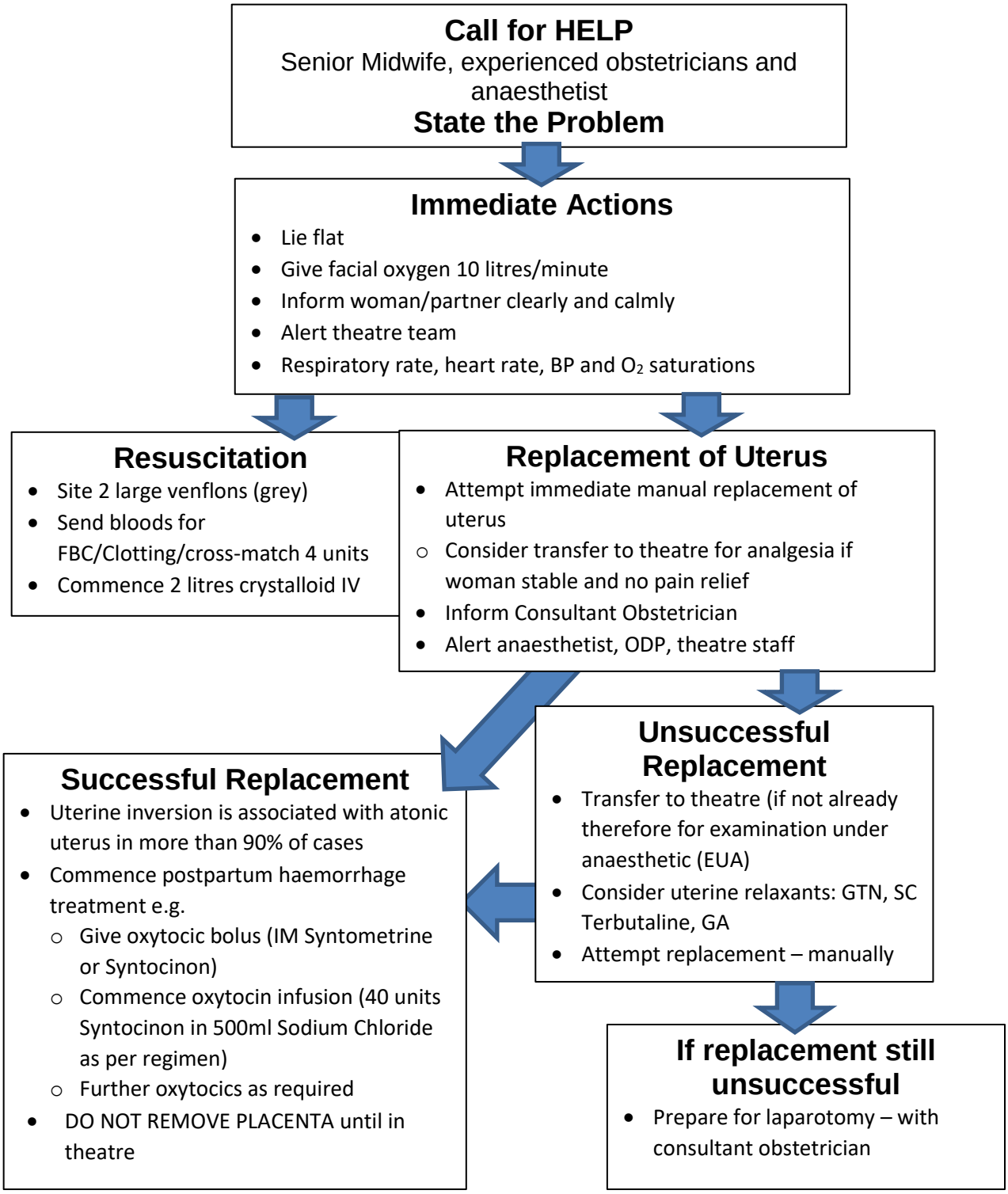
Uterine Inversions at Caesarean Section:

This is an extremely rare event. Early recognition of the condition and appropriate anatomical identification is the key. Consultant Obstetrician and Senior Anaesthetist should be asked to attend. The SSpR must aim to replace the uterus promptly whilst above resuscitative measures are being undertaken by a senior anaesthetist.

REFERENCES:-

1. Johanson R. Cox C, Grady K, Howell C. Managing obstetric emergencies and trauma: The MOET course manual. *RCOG Press.* 2003
2. Kochenour NK. Intrapartum Obstetric Emergencies. *Critical Care Clinics.* 1991;**7**(4):851-863
3. Baskett TF. Acute Uterine Inverstion: A Review of 40 cases. *J Obstet Gynaecol Can* 2002;**24**(12):953-956
4. Hostetler DR. Bosworth DO. Uterine inversion: A Life-threatening obstetric emergency. *JABFP* 2000;**13**(2)120-123
5. Hicks JC. Use of Nitroglycerin spray in uterine inverstion. *JABFP* 2000;**13**(5):374-375
6. PROMPT Course Manual, Second Edition, 2012.

FLOW CHART FOR MANAGEMENT OF UTERINE INVERSION



Uterine Inversion in the MLU

Flow chart to indicate action required.
Action to be taken by Midwife

Early recognition is important to enable prompt treatment

Symptoms and signs include:
Severe lower abdominal pain during the third stage
Haemorrhage is usually present
Shock is out of proportion to the blood loss due to increased vagal stimulation
Placenta may or may not be in situ
Uterus may not be palpable per abdomen
The cervix or uterus may be visible at the introitus or a mass found on vaginal examination

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Call for Help
2222 Obstetric Emergency Team
Also inform Delivery suite.

Reassure mother and partner

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Emergency equipment needed
PPH Trolley will have IV access equipment and fluids.

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Prepare to transfer to Delivery suite when patient stable with obstetric team

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Midwife to ensure baby is labelled prior to transfer of mother.

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Document and record events

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Complete incident form

Refer to guidelines for the management of post partum uterine inversion
Under obstetric guidelines on the clinical portal.

Management Algorithm for Acute Uterine Inversion