UKOSS

UK Obstetric Surveillance System

Re-laparotomy after Caesarean Section Study 01/21

Data Collection Form - CASE

Please report any woman having a re-exploration or laparotomy following Caesarean Section between 01/06/2021 – 31/05/2022

Case Definition:

Any woman who has a Caesarean Section (CS) **AND** who returns to theatre **AND**

EITHER

An exploration of the CS wound with the rectus sheath (RS) re-opened (i.e. deep exploration of the wound because of a wound problem, requiring the rectus sheath to be opened)

OR

a formal laparotomy (opening of the peritoneum) (e.g. to control bleeding, deal with abdominal/ pelvic infection, undertake a hysterectomy or for any other reason)

within 28 days of CS

Case ID Number: | | | | | | |

Royal College of Obstetricians and Gynaecologists

Bringing to life the best in women's health care

Please return the completed form to:

ukoss@npeu.ox.ac.uk

UKOSS
National Perinatal Epidemiology Unit
University of Oxford, Old Road Campus, Oxford, OX3 7LF

Phone: 01865 617764 / 617774

Reporting Month: _____

Reporting Hospital: _____

NPEU

Instructions

1. Please do not enter any personally identifiable information (e.g. name, address or hospital number) on this form.
2. Please record the ID number from the front of this form against the woman's name on the table provided in the UKOSS folder.
3. Fill in the form using the information available in the woman's case notes.
4. Tick the boxes as appropriate. If you require any additional space to answer a question please use the space provided in section 7.
5. Please complete all dates in the format DD/MM/YY, and all times using the 24hr clock e.g. 18.37
6. If codes or examples are required, some lists (not exhaustive) are included on the back page of the form.
7. If the woman has not yet delivered, please complete the form as far as you are able, excluding delivery and outcome information, and return to the UKOSS Administrator. We will send these sections again for you to complete two weeks after the woman's expected date of delivery.

   If you do not know the answers to some questions, please indicate this in section 7.

   If you encounter any problems with completing the form please contact the UKOSS Administrator or use the space in section 7 to describe the problem.

Section 1: Woman's details

1.1 Year of birth Y Y Y Y

1.2 Ethnic group[1]* *(enter code, please see back cover for guidance)* ☐☐

1.3 Marital status single ☐ married ☐ cohabiting ☐

1.4 Was the woman in paid employment at booking? Yes ☐ No ☐

If Yes, what is her occupation

_____

1.5 Height at booking ☐☐☐ cm

1.6 Weight at booking ☐☐☐.☐ kg

1.7 Smoking status never ☐ gave up prior to pregnancy ☐ current ☐ gave up during pregnancy ☐

Section 2: Previous Obstetric History

2.1 Gravidity

Number of previous completed pregnancies beyond 24 weeks ☐☐

Number of previous pregnancies less than 24 weeks ☐☐

Number of previous Caesarean Sections (CS) ☐☐

If no previous pregnancies, *please go to section 3*

2.2 Did the woman have any previous pregnancy problems?[2]* Yes ☐ No ☐

If Yes, please specify _____

*For guidance please see back cover

Section 3: Previous Medical History

3.1 **Has the woman had any other previous uterine surgery?[3]*** Yes ☐ No ☐

If Yes, please specify _____

3.2 **Has the woman had any other previous abdominal surgery (other than CS)?** Yes ☐ No ☐

If Yes, please specify _____

3.3 **Has the woman had any other previous medical problems?[4]*** Yes ☐ No ☐

If Yes, please specify _____

Section 4: This Pregnancy

4.1 **Final Estimated Date of Delivery (EDD)[5]*** D D / M M / Y Y

4.2 **Was this pregnancy a multiple pregnancy?** Yes ☐ No ☐

If Yes, specify number of fetuses ☐

4.3 **Was placenta praevia diagnosed prior to delivery?** Yes ☐ No ☐

If Yes, please specify the grade (I-IV) ☐☐

4.4 **Was placental invasion diagnosed prior to delivery?** Yes ☐ No ☐

If Yes, was this *(please tick one)* Accreta ☐ Increta ☐ Percreta ☐

4.5 **Were there other any problems in this pregnancy?[2]*** Yes ☐ No ☐

If Yes, please specify _____

4.6 **Were any fibroids noted on ultrasound scans in this pregnancy?** Yes ☐ No ☐

If Yes, what was the maximum diameter recorded ☐☐ cm

Was the woman prescribed any anti-coagulants/antiplatelet agents during pregnancy? Yes ☐ No ☐

If Yes, please specify the anti-coagulant regime and the anti-platelet agent *(tick all that apply)*

LMWH Prophylactic dose ☐ LMWH Treatment dose ☐ Warfarin ☐

Aspirin ☐ Clopidogrel ☐ Other ☐

If Other, please specify _____

If Yes, When was the last dose of an anti-coagulant/antiplatelet agent given prior to giving birth?

	< 24 hours	1 – 7 days	> 7 days
Anti-coagulant	☐	☐	☐
Anti-platelet agent	☐	☐	☐

Section 5: Delivery

5.1 Did the woman labour? Yes ☐ No ☐

If Yes, what was the Date/Time of onset of labour? D D / M M / Y Y h h : m m (24hr)

5.2 What was the date and time of rupture of membranes? D D / M M / Y Y h h : m m (24hr)

5.3 What was the cervical dilation before the decision to perform a CS? ☐☐ cm

Was an instrumental delivery attempted prior to the CS? Yes ☐ No ☐

5.5 What was the primary indication for CS? _____

5.6 What type of uterine incision was used? *(please tick one)*

Lower Segment ☐ Classical ☐ Other ☐

5.7 What was the grade of urgency?[6]* ☐

5.8 What was the grade of the MOST SENIOR obstetrician scrubbed up & operating for the caesarean section? *(please tick one)*

Consultant ☐ ST5 or above ☐ ST4 or below ☐ Specialty Doctor ☐

If not a consultant, was the consultant present in the theatre at any time during the caesarean section? Yes ☐ No ☐ Not recorded ☐

5.9 Were there adhesions between the uterus and abdominal wall noted at CS? Yes ☐ No ☐

5.10 What was the type of anaesthesia utilised for CS? Regional ☐ General ☐

5.11 Were any of the following diagnosed intra-operatively during the CS (i.e. not suspected pre-surgery)? *(tick all that apply)*

Uterine atony ☐ Uterine dehiscence ☐ Uterine rupture ☐ Abruption ☐

Placenta praevia ☐ Placenta percreta ☐ Placenta increta ☐ Placenta accreta ☐

If placenta praevia was diagnosed, please specify the grade (I-IV) ☐

5.12 Did the woman have a primary post-partum haemorrhage? Yes ☐ No ☐

If Yes, what was the estimated blood loss? ☐☐☐☐ ml

What was the underlying cause of any haemorrhage? *(tick all that apply)*

Uterine atony ☐ Uterine trauma ☐ Rupture ☐

Uterine infection ☐ Bleeding from uterine incision ☐ Other ☐

If Other, please specify _____

5.13 Was there any evidence of coagulopathy intra-operatively? Yes ☐ No ☐

5.14 Did the woman decline blood products ? Yes ☐ No ☐

If No, were blood products given? Yes ☐ No ☐

5.15 Was the major obstetric haemorrhage pathway activated during CS? Yes ☐ No ☐

5.16 Were any of the following required during the CS? *(tick all that apply)*

Intra-uterine balloon ☐ Uterine packing ☐ B-Lynch or other brace suture ☐

Hysterectomy ☐ Drain insertion ☐ Pelvic artery ligation ☐ Uterine artery ligation ☐

5.17 Were any of the following damaged during surgery ?

Bladder Yes ☐ No ☐

Bowel Yes ☐ No ☐

Other Yes ☐ No ☐ Please specify _____

5.18 What was the suture material used to close the rectus sheath? *(please tick one)*

Vicryl (or similar absorbable) ☐ PDS (longterm absorbable) ☐
Nylon/Prolene (non-absorbable) ☐ Other

If Other, please specify _____

5.19 Was the woman admitted to ITU (critical care level 3) or HDU (level 2)? Yes ☐ No ☐

If Yes, was this planned pre-operatively Yes ☐ No ☐

Section 6: Women's Outcomes

Section 6a: Re-exploration Details

6a.1 Date and Time of first re-exploration? D D / M M / Y Y h h : m m (24hr)

6a.2 What is the main clinical indication for the re-exploration? *(please tick one)*

Suspected intraabdominal bleeding or haematoma ☐
Suspected intraabdominal sepsis or collection ☐ Suspected bowel damage ☐
Suspected bowel obstruction ☐ Suspected bladder damage ☐ Wound haematoma ☐
Wound sepsis or collection ☐ Other ☐

If Other, please specify _____

6a.3 What symptoms were reported by the woman before the re-exploration? *(tick all that apply)*

None ☐ Abdominal pain ☐ Vaginal bleeding ☐ Fever ☐ Vomiting ☐
Signs of hypotension (e.g.dizziness) ☐ Other ☐

If Other, please specify _____

6a.4 Was the woman started on antibiotics before the re-exploration? Yes ☐ No ☐

If Yes, date antibiotics commenced? D D / M M / Y Y

6a.5 Was any radiological abdominopelvic imaging carried out before re-exploration? Yes ☐ No ☐

If Yes, please specify the imaging CT Scan ☐ US Abdomen ☐ MRI ☐ IVU/IVP ☐

6a.6 What anaesthesia was used for re-exploration? *(tick all that apply)*

Local infiltration ☐ Regional ☐ General ☐

6a.7 Were any of the following problems reported during the anaesthetic? *(tick all that apply)*

Hypotension (BP< 90mm Hg) ☐ Difficult Intubation ☐ Failed Intubation ☐ None ☐

6a.8 What was the grade of the most senior operating surgeon during the re-exploration?

Consultant ☐ ST5 or above ☐ ST4 or below ☐ Specialty Doctor ☐

6a.9 Were any other specialties involved during re-exploration? Yes ☐ No ☐

If Yes, please tick all that apply:

General surgery ☐ Urology ☐ Vascular surgery ☐ Other ☐

If Other, please specify _____

6a.10 Was the rectus sheath opened during the re-exploration? Yes ☐ No ☐

6a.11 Was the peritoneum opened during the re-exploration? Yes ☐ No ☐

6a.12 What were the findings of the re-exploration? *(tick all that apply)*

Haematoma/bleeding:

Above rectus sheath ☐ Below rectus sheath ☐ Intra-abdominal ☐

Focus of infection/abscess:

Above rectus sheath ☐ Below rectus sheath ☐ Intra-abdominal ☐

Other:

Generalised or pelvic peritonitis ☐ Damage to bladder or bowel ☐

Retained foreign object ☐ Retained products of conception ☐ Negative laparotomy ☐

Other ☐

If Other, please specify _____

6a.13 Please list the procedures carried out during the re-exploration?[7]*

_____

6a.14 Did the woman decline blood products during re-exploration? Yes ☐ No ☐

If No, were blood products given? Yes ☐ No ☐

6a.15 Was the major obstetric haemorrhage pathway activated during re-exploration? Yes ☐ No ☐

6a.16 What was the estimated blood loss during the re-exploration? ☐☐☐☐ ml

6a.17 Details of Invasive monitoring utilised for the re-exploration?

No invasive monitoring ☐ Arterial line ☐ Central Line ☐ Other ☐

If Other, please specify _____

6a.18 Did the woman have any more subsequent re-explorations? Yes ☐ No ☐

If Yes, specify the date(s) of the further re-explorations and procedure performed?[7]* _____

6a.19 Did the woman receive level 2 (HDU) care following re-exploration? Yes ☐ No ☐

6a.20 Did the woman receive level 3 (ITU) care following re-exploration? Yes ☐ No ☐

6a.21 Did the woman require any mechanical ventilatory support following re-exploration? Yes ☐ No ☐ Not known ☐

6a.22 Did the woman require any vasopressor or ionotropic drug infusion in HDU or ITU? Yes ☐ No ☐ Not known ☐

6a.23 Did any other major maternal morbidity occur?[8]* Yes ☐ No ☐

If Yes, please specify _____

6a.24 Has the woman been discharged from the hospital? Yes ☐ No ☐

If Yes, please insert the date of discharge D D / M M / Y Y

6a.25 Did the woman die? Yes ☐ No ☐

If Yes, please specify date of death D D / M M / Y Y

What was the primary cause of death as stated on the death certificate?

(Please state if not known.) _____

Section 6b: Infant 1

NB: If more than one infant, for each additional infant, please photocopy the infant section of the form **(before filling it in)** and attach extra sheet(s) or download additional forms from the website: www.npeu.ox.ac.uk/ukoss

Date and time of delivery D D / M M / Y Y h h : m m (24hr)

6b.2 Birthweight ☐☐☐☐ g

6b.3 Was the infant stillborn? Yes ☐ No ☐

6b.4 5 min Apgar ☐☐

6b.5 Was the infant admitted to a Neonatal Intensive Care Unit? Yes ☐ No ☐

6b.6 Did any other major infant complications occur?[9]* Yes ☐ No ☐

If Yes, please specify _____

6b.7 Did this infant die? Yes ☐ No ☐

Section 7:

Please use this space to enter any other information you feel may be important

Section 8:

Name of person completing the form _____

Designation _____

Today's date D D / M M / Y Y

You may find it useful in the case of queries to keep a copy of this form.

Definitions

1. UK Census Coding for ethnic group

WHITE
- 01. British
- 02. Irish
- 03. Any other white background

MIXED
- 04. White and black Caribbean
- 05. White and black African
- 06. White and Asian
- 07. Any other mixed background

ASIAN OR ASIAN BRITISH
- 08. Indian
- 09. Pakistani
- 10. Bangladeshi
- 11. Any other Asian background

BLACK OR BLACK BRITISH
- 12. Caribbean
- 13. African
- 14. Any other black background

CHINESE OR OTHER ETHNIC GROUP
- 15. Chinese
- 16. Any other ethnic group

2. Previous or current pregnancy problems, including:

Thrombotic event
Amniotic fluid embolism
Eclampsia
3 or more miscarriages
Preterm birth or mid trimester loss
Neonatal death
Stillbirth
Baby with a major congenital abnormality
Small for gestational age (SGA) infant
Large for gestational age (LGA) infant
Infant requiring intensive care
Puerperal psychosis
Placenta praevia
Gestational diabetes
Significant placental abruption
Post-partum haemorrhage requiring transfusion
Surgical procedure in pregnancy
Hyperemesis requiring admission
Dehydration requiring admission
Ovarian hyperstimulation syndrome
Severe infection e.g. pyelonephritis

3. Examples of other previous uterine surgery:

Myomectomy
Endometriosis surgery
Endometrial resection/ablation
Septal resection
Polypectomy

4. Previous or pre-existing maternal medical problems, including:

Cardiac disease (congenital or acquired)
Renal disease
Endocrine disorders e.g. hypo or hyperthyroidism
Psychiatric disorders
Haematological disorders e.g. sickle cell disease, diagnosed thrombophilia
Inflammatory disorders e.g. inflammatory bowel disease
Autoimmune diseases
Cancer
HIV

5. Estimated date of delivery (EDD):

Use the best estimate (ultrasound scan or date of last menstrual period) based on a 40 week gestation

6. RCA/RCOG/CEMACH/CNST Classification for urgency of caesarean section:

1. Immediate threat to life of woman or fetus
2. Maternal or fetal compromise which is not immediately life-threatening
3. Needing early delivery but no maternal or fetal compromise
4. At a time to suit the woman and maternity team

7. Surgical procedures:

Drainage of haematoma above rectus sheath
Drainage of haematoma below rectus sheath
Drainage of haematoma in abdomen/pelvis (state site):
Drainage of abscess/infected collection above rectus sheath
Drainage of abscess/infected collection below rectus sheath
Drainage of abscess/infected collection in abdomen/pelvis (state site)
Bleeding vessel identified & tied off/repaired (state site)
Hysterectomy
Repair of organ damage (state organ – e.g. small bowel, large bowel, bladder, ureter)

8. Major maternal medical complications, including:

Persistent vegetative state
Cardiac arrest
Cerebrovascular accident
Adult respiratory distress syndrome
Disseminated intravascular coagulopathy
HELLP
Pulmonary oedema
Secondary infection e.g.pneumonia
Renal failure
Thrombotic event
Septicaemia
Required ventilation

9. Fetal/infant complications, including:

Respiratory distress syndrome
Intraventricular haemorrhage
Necrotising enterocolitis
Neonatal encephalopathy
Chronic lung disease
Severe jaundice requiring phototherapy
Major congenital anomaly
Severe infection e.g. septicaemia, meningitis
Exchange transfusion