ID Number:

UKOSS

UK Obstetric Surveillance System

Low maternal plasma fibrinogen Study 03/17

Data Collection Form - CASE

Please report any woman delivering on or after the 1st November 2017 and before 31st October 2018

Case Definition:

All women identified as having a laboratory Clauss or derived plasma fibrinogen of <2g/L and/or a Fibtem (A5 or A10 or MCF) <10mm and/or TEG function at fibrinogen <200 mg/dl at any point in pregnancy or immediately postpartum (up to first hospital discharge after the end of pregnancy).

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.
8. If you do not know the answers to some questions, please indicate this in section 7.
9. 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.

Royal College of Obstetricians and Gynaecologists

Bringing to life the best in women's health care

Please return the completed form to:

UKOSS
National Perinatal Epidemiology Unit
University of Oxford
Old Road Campus
Oxford
OX3 7LF
Fax: 01865 617775
Phone: 01865 289714

Case reported in: _____

npeu National Perinatal Epidemiology Unit

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

_____

If No, what is her partner's (if any) 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 ☐☐

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

2.2 **Has the woman had any previous caesarean sections?** Yes ☐ No ☐

If Yes, please specify number in total ☐☐

2.3 **Has the woman had a previous post partum haemorrhage?** Yes ☐ No ☐

If Yes, please specify details

Date of post partum haemorrhage	Tick if transfused
D D / M M / Y Y	☐
D D / M M / Y Y	☐

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

If Yes, please specify _____

Section 3: Previous Medical History

3.1 **Does the woman have a history of acquired or inherited bleeding disorders?** Yes ☐ No ☐

If Yes, please specify _____

3.2 **Does the woman have a history of thrombocytopenia (platelet count <100)?** Yes ☐ No ☐

If Yes, please specify diagnosis _____

3.3 **Does the woman have any other pre-existing medical problems?**[3]* Yes ☐ No ☐

If Yes, please give details _____

*For guidance please see back cover

Section 4:

Section 4a: This Pregnancy

4a.1 **Final Estimated Date of Delivery (EDD)[4]*** D D / M M / Y Y

4a.2 **Was this pregnancy a multiple pregnancy?** Yes ☐ No ☐

If Yes, specify number of fetuses ☐

4a.3 **Was this woman receiving any of the following antenatally?**

Aspirin ☐ Low molecular weight heparin ☐ Other anticoagulant ☐

4a.4 **Were there any other problems in this pregnancy?[2]*** Yes ☐ No ☐

If Yes, please specify _____

Section 4b: Causes, diagnosis and management of low fibrinogen

4b.1 **What was the date and time fibrinogen was first recorded to be low (as per the case definition on the front of the data collection form)?**

D D / M M / Y Y h h : m m (24hr)

4b.2 **Which of the following factors were considered causes of the low fibrinogen?** *Please tick all that apply*

Placenta praevia ☐ Placenta accreta ☐ Placenta abruption ☐

Uterine rupture ☐ Uterine atony ☐

Trauma / uterine extensions at caesarean section ☐ Amniotic fluid embolism ☐

Vaginal/cervical tear/laceration ☐ Manual Removal of Placenta ☐ Uterine inversion ☐

Pre-eclampsia ☐ HELLP ☐ Eclampsia ☐

Infection or sepsis requiring antibiotics around delivery ☐

Inherited dysfibrinogenaemia or hypofibrinogenaemia ☐ Liver failure ☐ Other ☐

If Other, please specify _____

Which was considered the primary cause of the low fibrinogen?

_____

What date and time was this first suspected? D D / M M / Y Y h h : m m (24hr)

4b.3 **What was the date and time blood loss was first suspected note that this may be before delivery)?** D D / M M / Y Y h h : m m (24hr)

4b.4 **What was the woman's estimated blood loss**

BEFORE fibrinogen first recorded to be low ☐☐☐☐☐ ml

AFTER fibrinogen first recorded to be low ☐☐☐☐☐ ml

4b.5 **Did this woman refuse blood products?** Yes ☐ No ☐

*For guidance please see back cover

4b.6 Please indicate which of the following obstetric managements were used and the order in which they were used both before and after fibrinogen was recorded to be low (indicate all used by recording 1,2,3 etc according to order used):

	BEFORE fibrinogen first recorded to be low	AFTER fibrinogen first recorded to be low
Syntocinon infusion	☐	☐
Ergometrine	☐	☐
Misoprostol	☐	☐
Carboprost (hemabate)	☐	☐
Local haemostatic agents (e.g. Floseal)	☐	☐
Uterine tamponade	☐	☐
Laparotomy and primary repair	☐	☐
Uterine artery embolisation	☐	☐
Uterine artery ligation	☐	☐
Internal iliac artery ligation	☐	☐
B-Lynch or other brace suture	☐	☐
Intra-abdominal packing	☐	☐
Intrauterine balloons	☐	☐
Radiological Intervention	☐	☐
Hysterectomy	☐	☐

If a hysterectomy was carried out, what date and time was it performed?

D D / M M / Y Y h h : m m (24hr)

4b.7 Please record the amounts of blood components and fluid received in total by this woman both before and after fibrinogen was recorded to be low.

	Amount BEFORE fibrinogen first recorded to be low	Amount AFTER fibrinogen first recorded to be low
Packed red cells	☐☐ units	☐☐ units
Fresh Frozen Plasma	☐☐ units	☐☐ units
Platelets	☐☐ units	☐☐ units
Crystalloids: 0.9% Saline	☐☐☐☐☐ ml	☐☐☐☐☐ ml
Crystalloids: other	☐☐☐☐☐ ml	☐☐☐☐☐ ml
Colloids	☐☐☐☐☐ ml	☐☐☐☐☐ ml
Blood by cell salvage	☐☐☐☐☐ ml	☐☐☐☐☐ ml

4b.8 Was the haemoglobin concentration measured before fibrinogen was recorded as low? Yes ☐ No ☐

If Yes, please give Hb Level (g/L) _____

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

4b.9 Please specify the values of the following haematological parameters at diagnosis of low fibrinogen and the worst values recorded (indicate NR if not recorded)

	Value at diagnosis	Worst value
Hb g/dL		
Platelet count (x10^9/L)		
Prothrombin time (PT)		
INR		
Activated prothrombin time (APTT)		
Fibrinogen measured in laboratory (g/L)		
D-dimer		
TEG Functional fibrinogen		
TEG rapid TEG r time		
Rotem Extem CT		
Rotem Fibtem A5, A10 or MCF*		

**If Rotem Fibtem used please give A5 or A10 or MCF and indicate which parameter e.g. A10 6mm*

4b.10 How many units of RBC were given before first FFP transfusion? (if none, please record 0) ☐☐

4b.11 How many units of RBC were given before first cryoprecipitate or fibrinogen concentrate transfusion? (if none, please record 0) ☐☐

4b.12 Did the woman receive any of the following to stop bleeding during the obstetric haemorrhage?

	Tick if yes	Total dose given	Date and time first given	Fibrinogen concentration at the time of first dose	Fibrinogen concentration after last dose
Cryoprecipitate	☐		D D / M M / Y Y h h : m m (24hr)		
Fibrinogen concentrate	☐		D D / M M / Y Y h h : m m (24hr)		
Tranexamic acid	☐		D D / M M / Y Y h h : m m (24hr)		
Factor VIIa	☐		D D / M M / Y Y h h : m m (24hr)		
Prothrombin complex concentrate	☐		D D / M M / Y Y h h : m m (24hr)		

4b.13 Did you use point of care testing to guide blood transfusion management for any of the following?

Red blood cells ☐ Fresh frozen plasma ☐ Platelets ☐

Cryoprecipitate ☐ Fibrinogen concentrate ☐

Section 5: Delivery

5.1 **Did this woman have a miscarriage?** Yes ☐ No ☐

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

5.2 **Did this woman have a termination of pregnancy?** Yes ☐ No ☐

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

If Yes to 5.1 or 5.2, please now complete sections 6a, 7 and 8

5.3 **Was delivery induced?** Yes ☐ No ☐

If Yes, please state indication _____

5.4 **Did the woman labour?** Yes ☐ No ☐

If Yes, please state date and time of diagnosis of first stage of labour

D D / M M / Y Y h h : m m (24hr)

5.5 **Was delivery by caesarean section?** Yes ☐ No ☐

If Yes, please state:

Grade of urgency[5]* ☐

Indication for caesarean section _____

Method of anaesthesia: Regional ☐ General anaesthetic ☐

Section 6: Outcomes

Section 6a: Woman

6a.1 **Was the woman admitted to level 2 critical care (HDU) either on delivery suite or in a separate HDU?** Yes ☐ No ☐

6a.2 **Was the woman admitted to level 3 critical care (ITU)?** Yes ☐ No ☐

If Yes, please specify

Duration of stay ☐☐ days

Or Tick if woman is still in Level 3 critical care ☐

Or Tick if woman was transferred to another hospital ☐

6a.3 **Did the woman have a DVT or pulmonary embolism after management of haemorrhage?** Yes ☐ No ☐

6a.4 **Did the woman require any organ support?** Yes ☐ No ☐

If Yes, please specify (e.g. respiratory, renal) _____

6a.5 **Did any other major maternal morbidity occur?[6]*** Yes ☐ No ☐

If Yes, please specify _____

6a.6 **Has the woman been discharged?** Yes ☐ No ☐

If Yes, please give date of discharge D D / M M / Y Y

6a.7 **Was this woman readmitted after first discharge?** Yes ☐ No ☐

If Yes, please give date of

Readmission D D / M M / Y Y and date of final discharge D D / M M / Y Y

6a.8 **Did the woman die?** Yes ☐ No ☐

If Yes, please specify date and time of death D D / M M / Y Y h h : m m (24hr)

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

6b.1 Date and time of delivery D D / M M / Y Y h h : m m (24hr)

6b.2 Mode of delivery

Spontaneous vaginal ☐ Ventouse ☐ Forceps ☐

Breech ☐ Pre-labour caesarean section ☐ Caesarean section after onset of labour ☐

6b.3 Birthweight ☐☐☐☐ g

6b.4 Sex of infant: Male ☐ Female ☐ Indeterminate ☐

6b.5 Was the infant stillborn? Yes ☐ No ☐

If Yes, *please go to section 7.*

6b.6 5 min Apgar ☐☐

6b.7 Was the infant admitted to the neonatal unit? Yes ☐ No ☐

6b.8 Did any other major infant complications occur?[7]* Yes ☐ No ☐

If Yes, please specify _____

6b.9 Did this infant 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 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. 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

4. Estimated date of delivery (EDD):

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

5. 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

6. 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

7. 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