Massive transfusion due to Major Obstetric Haemorrhage Study 02/12

Data Collection Form - CASE

Please report all pregnant women admitted on or after 01 July 2012 and before 01 July 2013

Case Definition:

All pregnant women of 20 weeks gestation or more identified as having ≥ 8 units of RBC transfusion within a 24 hour period. Please include all women who have received both RBC transfusion and cell salvage, as long as the RBC transfusion is ≥ 8 units.

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: ______________________________
## 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 Clinician’s Section of the blue card retained 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.

### Section 1: Woman’s details

<table>
<thead>
<tr>
<th>1.1 Year of birth</th>
<th>Y Y Y Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2 Ethnic group* (enter code, please see back cover for guidance)</td>
<td></td>
</tr>
<tr>
<td>1.3 Marital status</td>
<td>single</td>
</tr>
<tr>
<td>1.4 Was the woman in paid employment at booking?</td>
<td>Yes</td>
</tr>
<tr>
<td>If Yes, what is her occupation</td>
<td></td>
</tr>
<tr>
<td>If No, what is her partner’s (if any) occupation</td>
<td></td>
</tr>
<tr>
<td>1.5 Height at booking</td>
<td>cm</td>
</tr>
<tr>
<td>1.6 Weight at booking</td>
<td>kg</td>
</tr>
<tr>
<td>1.7 Smoking status</td>
<td>never</td>
</tr>
</tbody>
</table>

### Section 2: Previous Obstetric History

<table>
<thead>
<tr>
<th>2.1 Gravidity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of previous completed pregnancies beyond 24 weeks</td>
<td></td>
</tr>
<tr>
<td>Number of previous pregnancies less than 24 weeks</td>
<td></td>
</tr>
<tr>
<td>If no previous pregnancies, please go to section 3</td>
<td></td>
</tr>
<tr>
<td>2.2 Has the woman had any previous caesarean sections?</td>
<td>Yes</td>
</tr>
<tr>
<td>If Yes, specify number in total:</td>
<td></td>
</tr>
</tbody>
</table>
2.3 Has the woman had a previous post partum haemorrhage?  
   If Yes, please specify details:
   Date of post partum haemorrhage
   Transfused
   D D / M M / Y Y
   D D / M M / Y Y
   D D / M M / Y Y

2.4 Did the woman have any other previous pregnancy problems?  
   If Yes, please give details

Section 3: Previous Medical History

3.1 Does the woman have a history of acquired or inherited bleeding disorders?  
   If Yes, please specify ________________________

3.2 Does the woman have a history of thrombocytopenia (platelet count <100)?  
   If Yes, please specify diagnosis ________________________

3.3 Does the woman have any other pre-existing medical problems?  
   If Yes, please give details ________________________

Section 4: This Pregnancy

4.1 Final Estimated Date of Delivery (EDD)
   D D / M M / Y Y

4.2 Was this pregnancy a multiple pregnancy?
   If Yes, specify number of fetuses

4.3 Were there any other problems in this pregnancy?
   If Yes, please specify ________________________

4.4 Was the haemoglobin level measured before delivery?
   If Yes, please give
   Hb Level
   Date of last measurement
   D D / M M / Y Y
   (g/dL)

Section 5: Delivery

5a.1 Did this woman have a miscarriage?
   If Yes, please specify date

5a.2 Did this woman have a termination of pregnancy?
   If Yes, please specify date

*For guidance please see back cover

If Yes to 5a.1 or 5a.2, please now complete sections 5b, 6a, 7 and 8.
5a.3 Was delivery induced?  
If Yes, please state indication ________________________________

Was prostaglandin used?  
If Yes, please specify

<table>
<thead>
<tr>
<th>Agent used</th>
<th>Date given</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DD/MM/YY</td>
<td></td>
</tr>
</tbody>
</table>

5a.4 Did the woman labour?  
If Yes, please state date and time of diagnosis of first stage of labour

5a.5 Was delivery by caesarean section?  
If Yes, please state:
- Grade of urgency
- Indication for caesarean section ________________________________
- Method of anaesthesia: Regional [ ] General anaesthetic [ ]

Section 5b: Massive obstetric haemorrhage

5b.1 What was the date and time of the onset of obstetric haemorrhage?

5b.2 Where was the woman at the onset of the obstetric haemorrhage?

5b.3 What was the estimated total blood loss?  (mls)

5b.4 What was the primary underlying cause of haemorrhage (please tick one only)
- Uterine atony [ ]
- Placenta praevia [ ]
- Placenta accreta/increta/percreta [ ]
- Placental abruption [ ]
- Uterine infection [ ]
- Uterine rupture [ ]
  - If Yes, please specify pre-labour [ ] during labour [ ] traumatic [ ]
- Extension of incision at time of caesarean section [ ]
- Extension of previous caesarean section scar at the time of caesarean section [ ]
- Genital tract trauma/tears [ ]
- Other cause [ ]
  - If Other, please specify ____________________________________________

5b.5 Please specify the first result after diagnosis and the worst haematological parameters recorded at the time of the obstetric haemorrhage?

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Diagnosis value</th>
<th>Worst value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hb g/dL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platelet count (x10^9/L)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*For guidance please see back cover*
### Prothrombin time (sec) PT
- [ ]
- [ ]
- [ ]

### INR
- [ ]
- [ ]
- [ ]

### Activated prothrombin time (sec) APTT
- [ ]
- [ ]
- [ ]

### Activated prothrombin time (ratio) APTT
- [ ]
- [ ]
- [ ]

### Fibrinogen (g/dL)
- [ ]
- [ ]
- [ ]

### D-dimer
- [ ]
- [ ]
- [ ]

---

### 5b.6 Did you use point of care testing to guide blood transfusion management for any of the following?

<table>
<thead>
<tr>
<th>Test</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haemoglobin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prothrombin time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thromboelastography (TEG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rotational thromboelastometry (ROTEM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIBTEM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### 5b.7 What was the woman's blood group?

- O+ [ ]
- A+ [ ]
- B+ [ ]
- AB+ [ ]
- O- [ ]
- A- [ ]
- B- [ ]
- AB- [ ]

---

### Section 5c: Management of obstetric haemorrhage

#### 5c.1 Please indicate what treatments were undertaken

Tick all that apply

<table>
<thead>
<tr>
<th>Treatment</th>
<th>[ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syntocinon infusion</td>
<td></td>
</tr>
<tr>
<td>Ergometrine</td>
<td></td>
</tr>
<tr>
<td>Prostaglandin F2α</td>
<td></td>
</tr>
<tr>
<td>Misoprostol</td>
<td></td>
</tr>
<tr>
<td>Intra-abdominal packing</td>
<td></td>
</tr>
<tr>
<td>Intrauterine balloons</td>
<td></td>
</tr>
<tr>
<td>Intrauterine packing</td>
<td></td>
</tr>
<tr>
<td>Recombinant factor VIIa</td>
<td></td>
</tr>
<tr>
<td>Vessel embolisation/ligation</td>
<td></td>
</tr>
<tr>
<td>Intra-arterial balloons</td>
<td></td>
</tr>
<tr>
<td>B-Lynch or other brace suture</td>
<td></td>
</tr>
<tr>
<td>Hysterectomy</td>
<td></td>
</tr>
</tbody>
</table>

Please rank the therapies in the order in which they were first used (1, 2, 3 etc)

---

### 5c.2 Please record the amounts of blood products and fluid received in total by this woman (units)

<table>
<thead>
<tr>
<th>Blood Product</th>
<th>[ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packed red cells</td>
<td></td>
</tr>
<tr>
<td>Date and time of first</td>
<td></td>
</tr>
<tr>
<td>Date and time of eighth</td>
<td></td>
</tr>
</tbody>
</table>

If date and time not known, were 8 units transfused within 24 hours?  

- Yes [ ]  
- No [ ]

Fresh Frozen Plasma [ ]
Section 6: Outcomes

Section 6a: Woman

6a.1 Was the woman admitted to ITU or level 3 care?  
Yes ☐ No ☐  
If Yes, please specify:  
Duration of stay ☐ days  
Or Tick if woman is still in HDU/ITU  
Or Tick if woman was transferred to another hospital

6a.2 Did any other major maternal morbidity occur?*  
Yes ☐ No ☐  
If Yes, please specify

6a.3 Has the woman been discharged?  
Yes ☐ No ☐  
If Yes, please give date of discharge ☐/☐/☐

6a.4 Did the woman die?  
Yes ☐ No ☐  
If Yes, please specify date and time of death ☐/☐/☐ ☛:☐  
What was the primary cause of death as stated on the death certificate?  
(Please state if not known.) ____________________________

---

5c.3 How many units of RBC were given before first FFP transfusion?  
OR tick if FFP not given

5c.4 How many units of RBC were given before first cryoprecipitate transfusion?  
OR tick if cryoprecipitate not given

5c.5 Did the woman receive Factor VIIa to stop bleeding during the obstetric haemorrhage?  
Yes ☐ No ☐  
If Yes, what was the total dose given?

5c.6 Did the woman receive tranexamic acid to stop bleeding during the obstetric haemorrhage?  
Yes ☐ No ☐  
If Yes, what was the total dose given?

5c.7 Has the woman participated in the WOMAN trial?  
Yes ☐ No ☐

5c.8 Did the woman receive fibrinogen concentrate to stop bleeding during the obstetric haemorrhage?  
Yes ☐ No ☐  
If Yes, what was the total dose given?  
Was this given as part of a clinical trial?  
Yes ☐ No ☐

5c.9 Did the woman receive prothrombin complex concentrate to stop bleeding during the obstetric haemorrhage?  
Yes ☐ No ☐  
If Yes, what was the total dose given?

---

Platelets ☐  
Cryoprecipitate ☐  
Crystalloid (ml) ☐ ☐ ☐  
Colloid (ml) ☐ ☐ ☐  
Cell salvage (ml) ☐ ☐ ☐

---

*For guidance please see back cover
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

6b.2 Mode of delivery

- Spontaneous vaginal
- Ventouse
- Lift-out forceps
- Rotational forceps
- Breech
- Pre-labour caesarean section
- Caesarean section after onset of labour

6b.3 Birthweight

6b.4 Sex of infant

- Male
- Female
- Indeterminate

6b.5 Was the infant stillborn?

If Yes, please go to section 7.

6b.6 5 min Apgar

6b.7 Was the infant admitted to the neonatal unit?

6b.8 Did any other major infant complications occur?*

If Yes, please specify

6b.9 Did this infant die?

If Yes, please specify date of death

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

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

*For guidance please see back cover
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
   Mendleson’s syndrome
   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