Vasa Praevia in Pregnancy Study 02/14

Data Collection Form - CASE

Please report any woman delivering on or after 1st December 2014 and before 1st December 2015

Case Definition:

A case should meet at least one of the criteria below:

1. Suspected VP on antenatal U/S ≥18 weeks gestation, and confirmed on antenatal U/S ≥31 weeks gestation (if not delivered prior to 31 weeks)
2. Palpation or visualisation of the fetal vessels during labour
3. Rupture of membranes with bleeding associated with fetal death/exsanguination or severe neonatal anaemia
4. Antenatal or intrapartum bleeding of fetal origin with pathologic CTG and/or positive Apt® test
5. VP documented in medical records as reason for admission and caesarean section

And

At least one of the following:

- Clinical examination of the placenta confirming intact or ruptured velamentous vessels. These may be a velamentous insertion of the umbilical cord or exposed fetal vessels between placental lobes
- Confirmation of VP on pathologic examination of the placenta
- Torn umbilical cord or placenta (not able to provide placental examination)

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: ____________________________

*For guidance please see back cover
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

1.1 Year of birth

1.2 Ethnic group* (enter code, please see back cover for guidance)

1.3 Marital status

1.4 Was the woman in paid employment at booking?

   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 completed pregnancies beyond 24 weeks

   Number of live births

   Number of stillbirths

   Please give date of delivery of the most recent completed pregnancy beyond 24 weeks:

   Number of pregnancies less than 24 weeks

   Number of miscarriages

   Number of terminations of pregnancy

   Number of ectopic pregnancies

   Please give the end date of the most recent pregnancy less than 24 weeks:

   *For guidance please see back cover
### Section 3: Previous Medical History

#### 3.1 Did the woman have any significant pre-existing medical problems?**

<table>
<thead>
<tr>
<th>Surgery type</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caesarean section</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evacuation of retained products of conception (ERPC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical termination of pregnancy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D&amp;C (Dilation &amp; Curettage)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D&amp;E (Dilation &amp; Evacuation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myomectomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual removal of placenta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If Other, please specify surgery type ____________________________

#### 2.2 Has the woman had any of the following uterine surgeries prior to this pregnancy?

<table>
<thead>
<tr>
<th>Surgery type</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caesarean section</td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In which fetus was vasa praevia diagnosed? Fetus 1 Fetus 2 Fetus 3

#### 2.3 Has the woman had placental abnormalities in any previous pregnancy?**

<table>
<thead>
<tr>
<th>Abnormality</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vasa praevia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Placenta praevia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Velamentous cord insertion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bilobed placenta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Succenturiate/ accessory lobed placenta</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 2.4 Did the woman have any other previous pregnancy problems?**

If Yes, please specify ____________________________

### Section 4: Current Pregnancy

#### 4.1 Final estimated date of delivery**

<table>
<thead>
<tr>
<th>Date in format DD/MM/YY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

#### 4.2 Was VP diagnosed antenatally?**

If Yes, what was the date of diagnosis?

<table>
<thead>
<tr>
<th>Date in format DD/MM/YY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

#### 4.3 Is this a multiple pregnancy?**

If Yes, specify number of fetuses

<table>
<thead>
<tr>
<th>Number of Fetuses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Is the pregnancy (please tick one only)

- Monochorionic monoamniotic
- Monochorionic diamniotic
- Monochorionic triamniotic
- Dichorionic diamniotic
- Dichorionic triamniotic
- Trichorionic triamniotic
- Other, please specify ____________________________

In which fetus was vasa praevia diagnosed? Fetus 1 Fetus 2 Fetus 3

*For guidance please see back cover
### 4.4 Were any of the following risk factors for VP confirmed before or immediately after delivery?

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>At ultrasound</th>
<th>At surgery</th>
<th>No</th>
<th>Not known</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low lying placenta detected</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bilobed placenta</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td>Not known</td>
</tr>
<tr>
<td>Succenturiate/ accessory lobed placenta</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td>Not known</td>
</tr>
<tr>
<td>Velamentous cord insertion</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td>Not known</td>
</tr>
<tr>
<td>Marginal cord insertion</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td>Not known</td>
</tr>
<tr>
<td>In Vitro Fertilisation</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td>Not known</td>
</tr>
</tbody>
</table>

### 4.5 How many formal ultrasound scans were performed after 17 weeks gestation?

### 4.6 Please give details of all formal ultrasound scans performed after 17 weeks gestation? (please continue in section 7 if required)

<table>
<thead>
<tr>
<th>Date of scan</th>
<th>Type of scan</th>
<th>Transabdominal / transvaginal / both</th>
<th>Was doppler used?</th>
<th>Was Vasa Praevia suspected?</th>
<th>Distance from internal os* (mm) (please state if not measured)</th>
<th>Closed cervical length (mm) (please state if not measured)</th>
<th>Other abnormal finding on scan (continue in section 7 if required - state if none)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.7 Was the woman admitted to hospital at any point during the pregnancy? (please continue in section 7 if required)

<table>
<thead>
<tr>
<th>Date of admission</th>
<th>Date of discharge</th>
<th>Was the admission because of VP?</th>
<th>Other reason</th>
<th>Details of other reason</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### 4.8 Was fetal fibronectin testing undertaken because of VP? If Yes, was it used to inform decision on admission?

### 4.9 Was cervical length measurement undertaken? If Yes, was it used to inform decision on admission?

### 4.10 Was delivery planned by caesarean section? If Yes, was this because of Vasa Praevia

Other reason planned (please specify) ____________________________________________________________

What was the planned date of caesarean section? D D / M M / Y

### 4.11 Was a course of antenatal steroids administered?

Yes No
If Yes, date first dose administered

4.12 Was magnesium sulphate administered for fetal neuroprotection?
   Yes ☐ No ☐
   If Yes, date of administration

4.13 Was there antenatal bleeding of fetal origin?
   Yes ☐ No ☐
   If Yes, how was it suspected/confirmed? (Please tick one only)
   Apt test* ☐ Pathological CTG ☐ Other, please specify _____________________________

4.14 Were there any other problems in this pregnancy? ☐
   If Yes, please specify _____________________________

Section 5a: Delivery

5a.1 Did this woman have a miscarriage?
   Yes ☐ No ☐
   If Yes, please specify date

5a.2 Did this woman have a termination of pregnancy?
   Yes ☐ No ☐
   If Yes, please specify date
   If Yes to 5a.1 or 5a.2, please now complete sections 6a, 7 and 8

5a.3 Is this woman still undelivered?
   Yes ☐ No ☐
   If Yes, will she be receiving the rest of her antenatal care from your hospital?
   Yes ☐ No ☐
   If No, please indicate name of hospital providing future care
   _____________________________
   Will she be delivered at your hospital?
   Yes ☐ No ☐
   If No, please indicate name of delivery hospital, then go to Section 7

5a.4 How did the membranes rupture?
   ARM ☐ Spontaneously ☐ At CS ☐ Not known ☐

5a.5 Was there bleeding when the membranes ruptured?
   Yes ☐ No ☐

5a.6 Did the woman labour?
   Yes ☐ No ☐
   If Yes, was VP suspected by palpation or visualisation of the fetal vessels in labour?
   Yes ☐ No ☐
   Was there bleeding during labour?
   Yes ☐ No ☐
   If Yes, were any of the following tests used to determine if the blood was of fetal origin? (please tick one only)
   Kleihauer test ☐ Apt test* ☐ Other ☐
   If Other, please specify _____________________________

5a.7 Was continuous electronic fetal monitoring used around the time of delivery/labour?
   Yes ☐ No ☐
   If Yes, when was the last CTG started before birth?
   _____________________________
   What was the CTG classification? (please tick one only)
   Normal ☐ Suspicious ☐ Pathological ☐

5a.8 Was delivery by caesarean section?
   Yes ☐ No ☐
   If Yes, please state
   Grade of urgency* ☐
   Indication for caesarean section _____________________________
   Method of anaesthesia: (please tick one only)
   Regional ☐ General anaesthetic ☐

*For guidance please see back cover
Section 5b: Placenta

(If multiple placentae, please complete for the placenta that shows evidence of vasa praevia)

5b.1 Was the placenta examined after delivery? Yes ☐ No ☐ Not known ☐

If Yes, what was the finding of the placental examination? (tick all that apply)

- Torn placenta/umbilical cord ☐
- Velamentous cord insertion ☐
- Velamentous vessels between placental lobes ☐
- Bilobed placenta ☐
- Succenturiate lobed placenta ☐
- Other (please specify) _____________ ☐

5b.2 Was placenta sent to pathology? Yes ☐ No ☐ Not known ☐

If Yes, what was the result? (tick one only)

- Normal ☐
- Fetal vessels in membranes ☐
- Results pending ☐
- Other (please give details) _____________ ☐

Section 6: Outcomes

Section 6a: Woman

6a.1 Was the woman admitted to ITU (critical care level 3)? Yes ☐ No ☐

If Yes, please specify:

- Duration of stay ___ days ☐
- Or Tick if woman is still in ITU (critical care level 3) ☐
- Or Tick if woman was transferred to another hospital ☐

6a.2 Did any major maternal morbidity occur? Yes ☐ No ☐

If Yes, please specify _____________

6a.3 Did the woman die? Yes ☐ No ☐

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) _____________

Was a post mortem examination undertaken? Yes ☐ No ☐

If Yes, did the examination confirm the certified cause of death? Yes ☐ No ☐

Section 6b: Infant

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 ___g

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

*For guidance please see back cover
6b.5 Was the infant stillborn?
   If Yes, when did this occur?  
   If Yes, go to section 7

6b.6 Apgar
   At 5 mins  
   At 10 mins

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

6b.8 Did the infant have any of the following?
   Anaemia  Renal failure*  Seizures

6b.9 Did the infant require a blood (red cell) transfusion?
   If Yes, how much was given?

6b.10 Were other blood products given?
   If Yes, please complete the table below

<table>
<thead>
<tr>
<th>Blood product</th>
<th>Volume (mls)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6b.11 Did any major infant complications occur?*10*
   If Yes, please specify

6b.12 Did this infant die?
   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)

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
________________________________________________________________________

*For guidance please see back cover
Definitions

1. UK Census Coding for ethnic group
   WHITE
   01. British
   02. Irish
   03. Any other white background (please specify)
   MIXED
   04. White and black Caribbean
   05. White and black African
   06. White and Asian
   07. Any other mixed background (please specify)
   ASIAN OR ASIAN BRITISH
   08. Indian
   09. Pakistani
   10. Bangladeshi
   11. Any other Asian background (please specify)
   BLACK OR BLACK BRITISH
   12. Caribbean
   13. African
   14. Any other black background (please specify)

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

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. Distance from internal os:
   This is the distance of the Vasa Praevia (fetal vessels) from the internal os.

6. The Apt test:
   The Apt test or alkali denaturation test is a test to differentiate maternal from fetal blood. It involves adding sodium hydroxide to the tested blood and then assessing the colour of the specimen.

7. 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

8. 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

9. Renal failure:
   Low urine output (<1ml/kg/hr after 24 hours) and rising serum creatinine.

10. 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
    Whole body cooling

Version 1, October 2014