



UK Obstetric Surveillance System

High Neuraxial Block Study 02/17 FORM E

Data Collection Form - CASE

Please report any pregnant woman delivering between 01/09/2017 and 31/08/2019

Case Definition:

Any pregnant woman who develops a high block in association with spinal and/or epidural anaesthesia /analgesia that requires ventilatory support* and /or cardiopulmonary resuscitation**.

*Ventilatory support includes the additional use of 'bag/mask' ventilation, or ventilation assisted by the use of a supraglottic airway device or endotracheal tube.

**Cardiopulmonary resuscitation includes the use of basic and advanced life support.

You have been sent High Neuraxial Block Form E

You have been allocated Form E because you answered the email questionnaire '*What was the very last anaesthetic intervention that directly resulted in the high neuraxial block?*' as

Single shot spinal/Spinal component of CSE

If this is NOT correct DO NOT complete this form.

Please contact the UKOSS Office at ukoss@npeu.ox.ac.uk as you will require a different form.



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

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 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 10.
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 10.**
9. If you encounter any problems with completing the form please contact the UKOSS Administrator or use the space in section 10 to describe the problem.

Section 1: Woman's details

- 1.1 Year of birth
- 1.2 Ethnic group^{1*} (enter code, please see back cover for guidance)
- 1.3 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 _____
- 1.4 Height at booking cm
- 1.5 Weight at booking kg
- 1.6 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 pregnancies less than 24 weeks
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 _____

Section 3: Previous Medical History

- 3.1 Please indicate whether any of the following were present: (Please tick all that apply)
Previous spinal surgery Spinal scoliosis Spinal kyphosis
Spinal canal stenosis Spina bifida Other
If Other, please give details _____
- 3.2 Did this woman have any other previous or pre-existing medical problems?^{3*} Yes No
If Yes, please give details _____

*For guidance please see back cover

Section 4: This Pregnancy

4.1 Final Estimated Date of Delivery (EDD)^{4*}

/ /

4.2 Was this a multiple pregnancy?

Yes No

If Yes, specify number of fetuses

4.3 Were there any **other** problems in this pregnancy except for High Neuraxial Block?^{2*}

Yes No

If Yes, please specify _____

Section 5:

Section 5a: Anaesthetic Intervention

5a.1 What was the initial indication for the primary (first) neuraxial procedure? (tick one only)

Labour analgesia Category 1 Caesarean Section Category 2 Caesarean Section
Category 3 Caesarean Section Category 4 Caesarean Section
Instrumental Delivery Retained products Tear repair Other

If Other, please give details _____

5a.2 When was the primary neuraxial procedure performed?

/ / : :
24hr

5a.3 Was the primary neuraxial procedure an epidural, SSS or CSE?

Epidural SSS CSE

If Epidural, please answer Q5a.4 If CSE, please answer Q.5a.5 If SSS, please answer Q.5a.6

5a.4 If Epidural,

- i). How many attempts were there to locate the epidural space (successful and unsuccessful)? Successful Unsuccessful
- ii). Was loss of resistance determined using saline or air? Saline Air
- iii). Was there a recognised dural tap with the Tuohy needle? Yes No

5a.5 If CSE,

- i). How many attempts were there to locate the epidural space (successful and unsuccessful)? Successful Unsuccessful
- ii). Was loss of resistance determined using saline or air? Saline Air
- iii). Was there a recognised dural tap with the Tuohy needle? Yes No
- iv). How many attempts were there to puncture the dura with the spinal needle?

5a.6 If SSS,

- i). How many attempts were there to puncture the dura with the spinal needle?

Section 5e: High neuraxial block after single shot spinal (SSS) or spinal component of CSE

5e.1 What agent and dose/concentration/volume was given e.g. 2 mls 0.5% L-Bupivacaine? _____

5e.2 Was a repeat spinal attempted?

Yes No

If Yes, what date/time?

/ / : :
24hr

What agent and dose/concentration/volume was given e.g. 2 mls 0.5% L-Bupivacaine _____

Section 6: Diagnosis of High Neuraxial Block

6.1 What was the date and time when symptoms/signs of a high neuraxial block were first detected? / / : 24hr

6.2 What was the date and time when the high neuraxial block was first diagnosed? / / : 24hr

6.3 Where was the woman when the high neuraxial block occurred?
Labour room In transit to operating theatre Operating theatre
In recovery Other
If Other, please give details _____

6.4 What was the first symptom that suggested the diagnosis of a high neuraxial block? (Please tick one only)
Anxiety Nausea Vomiting Increased lower limb motor block
Arm dysaesthesia / paraesthesia / paralysis Hand dysaesthesia / paraesthesia / paralysis
Shortness of breath Difficulty speaking Difficulty coughing
Decreased conscious level Loss of consciousness Other
If Other, please give details _____

6.5 What other symptoms subsequently occurred that suggested the diagnosis of a high neuraxial block? (Please tick all that apply)
Anxiety Nausea Vomiting Increased lower limb motor block
Arm dysaesthesia / paraesthesia / paralysis Hand dysaesthesia / paraesthesia / paralysis
Shortness of breath Difficulty speaking Difficulty coughing
Decreased conscious level Loss of consciousness Other
If Other, please give details _____

6.6 What was the first sign that suggested the diagnosis of a high neuraxial block? (Please tick one only)
Hypotension Tachycardia Bradycardia Decreasing oxygen saturations
Cranial nerve involvement Fetal heart rate changes Other
If Other, please give details _____

6.7 What other signs subsequently occurred that suggested the diagnosis of a high neuraxial block? (Please tick all that apply)
Hypotension Tachycardia Bradycardia Decreasing oxygen saturations
Cranial nerve involvement Fetal heart rate changes Other
If Other, please give details _____

6.8 Did the woman have a respiratory arrest? Yes No
If Yes, please state date and time / / : 24hr

6.9 Did the woman have a cardiorespiratory arrest? Yes No
If Yes, please state date and time / / : 24hr

i). Were chest compressions started? Yes No
If Yes, for how long were they continued? _____

ii). What was the original rhythm at arrest?
Shockable eg VF/ pulseless VT Non-shockable eg PEA or Asystole Unknown

- iii). How many shocks were given?
- iv). Was spontaneous circulation restored? Yes No
- v). How long was the patient in cardiorespiratory arrest _____
- vi). What agents were used to provide anaesthesia or avoid awareness?

| Name of drug | Date given | Time given | Dose and units | Route |
|--------------|---|--|----------------|-------|
| _____ | <input type="text" value="D"/> <input type="text" value="D"/> <input type="text" value="M"/> <input type="text" value="M"/> <input type="text" value="Y"/> <input type="text" value="Y"/> | <input type="text" value="h"/> <input type="text" value="h"/> <input type="text" value="m"/> <input type="text" value="m"/> | _____ | _____ |
| _____ | <input type="text" value="D"/> <input type="text" value="D"/> / <input type="text" value="M"/> <input type="text" value="M"/> / <input type="text" value="Y"/> <input type="text" value="Y"/> | <input type="text" value="h"/> <input type="text" value="h"/> : <input type="text" value="m"/> <input type="text" value="m"/> <small>24hr</small> | _____ | _____ |
| _____ | <input type="text" value="D"/> <input type="text" value="D"/> <input type="text" value="M"/> <input type="text" value="M"/> <input type="text" value="Y"/> <input type="text" value="Y"/> | <input type="text" value="h"/> <input type="text" value="h"/> <input type="text" value="m"/> <input type="text" value="m"/> | _____ | _____ |

Section 7: Management of high neuraxial block

7.1 What airway support did the woman require?

Bag-mask-valve ventilation only

If Yes, for how long was this required? _____

Laryngeal mask airway

If Yes, for how long was this required? _____

Endotracheal intubation

If Yes, for how long was this required? _____

7.2 Please list all drugs given to secure the airway, with doses, in order. Include repeated doses.

| Name of drug | Date given | Time given | Dose and units | Route |
|--------------|---|--|----------------|-------|
| _____ | <input type="text" value="D"/> <input type="text" value="D"/> <input type="text" value="M"/> <input type="text" value="M"/> <input type="text" value="Y"/> <input type="text" value="Y"/> | <input type="text" value="h"/> <input type="text" value="h"/> <input type="text" value="m"/> <input type="text" value="m"/> | _____ | _____ |
| _____ | <input type="text" value="D"/> <input type="text" value="D"/> / <input type="text" value="M"/> <input type="text" value="M"/> / <input type="text" value="Y"/> <input type="text" value="Y"/> | <input type="text" value="h"/> <input type="text" value="h"/> : <input type="text" value="m"/> <input type="text" value="m"/> <small>24hr</small> | _____ | _____ |
| _____ | <input type="text" value="D"/> <input type="text" value="D"/> <input type="text" value="M"/> <input type="text" value="M"/> <input type="text" value="Y"/> <input type="text" value="Y"/> | <input type="text" value="h"/> <input type="text" value="h"/> <input type="text" value="m"/> <input type="text" value="m"/> | _____ | _____ |

7.3 Were there any difficulties securing the airway? Yes No

If Yes, please give details _____

7.4 In the immediate management of high neuraxial block what fluids did the woman receive from the time of diagnosis to return of cardiovascular stability?

| Fluid | Volume | Rate |
|-------|--------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |

7.5 Did the woman receive any drugs to treat bradycardia, tachycardia or hypotension? Yes No

If Yes, please list any drugs given

| Name of drug | Dose and units | Route | Date given | Time given |
|--------------|----------------|-------|---|--|
| _____ | _____ | _____ | <input type="text" value="D"/> <input type="text" value="D"/> <input type="text" value="M"/> <input type="text" value="M"/> <input type="text" value="Y"/> <input type="text" value="Y"/> | <input type="text" value="h"/> <input type="text" value="h"/> <input type="text" value="m"/> <input type="text" value="m"/> |
| _____ | _____ | _____ | <input type="text" value="D"/> <input type="text" value="D"/> / <input type="text" value="M"/> <input type="text" value="M"/> / <input type="text" value="Y"/> <input type="text" value="Y"/> | <input type="text" value="h"/> <input type="text" value="h"/> : <input type="text" value="m"/> <input type="text" value="m"/> <small>24hr</small> |
| _____ | _____ | _____ | <input type="text" value="D"/> <input type="text" value="D"/> <input type="text" value="M"/> <input type="text" value="M"/> <input type="text" value="Y"/> <input type="text" value="Y"/> | <input type="text" value="h"/> <input type="text" value="h"/> <input type="text" value="m"/> <input type="text" value="m"/> |

Section 8: Outcomes

Section 8a: Woman

8a.1 Was the woman admitted to ITU (critical care level 3)?

Yes No

If Yes, please specify:

Duration of stay

days

What was the duration of ventilation (days)?

days

What was the duration of inotropic support (days)?

days

Is the woman still in ITU (critical care level 3)?

Yes No

Was the woman transferred to another hospital

Yes No

8a.2 Did any other major maternal morbidity occur?^{6*}

Yes No

If Yes, please specify _____

8a.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) _____

Section 8b: 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

8b.1 Date and time of delivery

/ / : 24hr

8b.2 Prior to the high neuraxial block what was the intended mode of delivery

Spontaneous vaginal Ventouse Forceps

Pre-labour caesarean section Caesarean section after onset of labour

8b.3 Was the delivery expedited because of the high neuraxial block

Yes No

If Yes, what was the time from decision to delivery?

: 24hr

Was the delivery carried out to aid maternal resuscitation or to aid fetal resuscitation

Maternal resuscitation Fetal resuscitation Both Unknown

8b.4 What was the actual mode of delivery?

Spontaneous vaginal Ventouse Forceps

Pre-labour caesarean section Caesarean section after onset of labour

8b.5 Where was the baby delivered?

Delivery room Theatre Other

If Other, please give details _____

8b.6 Birthweight

g

8b.7 Sex of infant

Male Female Indeterminate

8b.8 Was the infant stillborn?

Yes No

If Yes, was the death ante-partum or intra-partum?

Ante-partum Intra-partum

8b.9 Apgar

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 morbidity, 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