



UK Obstetric Surveillance System

Failed intubation Study 03/08

Data Collection Form - CASE

**Please report all women delivering between 1st April 2008
and 31st March 2010.**

Case Definition:

Any woman of over 20 weeks gestation given a general anaesthetic (whether on delivery suite or another hospital department) where failed intubation has occurred.

Failed Intubation is defined as failure to achieve tracheal intubation during a rapid sequence induction for obstetric anaesthesia, thereby initiating a failed intubation drill.

Please return the completed form to:

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

Fax: 01865 289701
Phone: 01865 289714

Case reported in: _____



Royal College of
Obstetricians and
Gynaecologists

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 you do not know the answers to some questions, please indicate this in section 7.**
8. 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^{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 Pregnancies

- 2.1 Gravity**
Number of completed pregnancies 24 weeks and beyond
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 _____
- 2.3 Previous LSCS under general anaesthesia** Yes No
If Yes, was there
Documented difficult intubation Failed intubation None documented

*For guidance please see back cover

Section 3: Previous Medical History

3.1 Previous or pre-existing medical problem^{3*} Yes No

If Yes, please specify _____

3.2 Previous surgical procedures under general anaesthesia Yes No

If Yes, was there

Documented difficult intubation Failed intubation None documented

3.3 Predictors of difficult intubation. Please record the following or tick if not documented. **Not documented**

Mallampati score^{4*}

Inter-incisor gap . cms

Able to protrude lower incisors beyond upper incisors? Yes No

Cervical spine abnormality Yes No

If Yes, please specify _____

Other

If Other, please specify _____

Section 4: This Pregnancy

4.1 Final Estimated Date of Delivery (EDD)^{5*} / /

4.2 Was this pregnancy a multiple pregnancy? Yes No

If Yes, please specify number of fetuses

4.3 Were there problems in this pregnancy?^{2*} Yes No

If Yes, please specify _____

Section 5: Delivery / Surgical / Anaesthetic intervention

5.1 Is this woman still undelivered? Yes No

If No, Did the woman labour? Yes No

Was delivery by c-section? Yes No

If Yes, please state grade of urgency^{6*}

And give indication for c-section _____

If Yes, what was the date of the anaesthetic when intubation failed? / /

Will she be delivered at your hospital? Yes No

If No, please indicate name of delivery hospital

5.2 Was the anaesthetic when intubation failed, given for caesarean-section? Yes No

If No, for what surgical procedure was the general anaesthetic given?

5.3 Please indicate which anaesthetists were present at any point during the procedure

Grade	Years in training (trainee)	Locum Y/N	Present on induction of anaesthesia Y/N
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

5.4 Indication for general anaesthesia

- Urgency Patient refusal of regional Coagulation abnormality
 Failed or inadequate regional Other

If Other, please specify _____

5.5 Was antacid prophylaxis against aspiration prescribed in the previous 6 hours (eg metoclopramide, H2 antagonist, proton pump inhibitor, sodium citrate)?

Yes No

Please state drug, dose and time of administration. Continue in section 7 if necessary.

Drug	Dose	Time
_____	_____	<input type="text" value="h"/> <input type="text" value="h"/> : <input type="text" value="m"/> <input type="text" value="m"/>
_____	_____	<input type="text" value="h"/> <input type="text" value="h"/> : <input type="text" value="m"/> <input type="text" value="m"/>
_____	_____	<input type="text" value="h"/> <input type="text" value="h"/> : <input type="text" value="m"/> <input type="text" value="m"/>
_____	_____	<input type="text" value="h"/> <input type="text" value="h"/> : <input type="text" value="m"/> <input type="text" value="m"/>

5.6 Time of induction of general anaesthesia

:

5.7 Was cricoid pressure applied at induction?

Yes No

5.8 Was it released to assist airway insertion?

Yes No

5.9 Please list all drugs given for induction, with doses, in order. Include repeated doses. (Continue in section 7 if necessary)

Drug	Dose	Intubation successful?
_____	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>
_____	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>
_____	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>
_____	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>

5.10 Cormack-Lehane laryngoscopy grade^{7*} (Best view at the time intubation failure was declared)

5.11 How many attempts at laryngoscopy were made? This is the number of times the laryngoscope was inserted into the mouth.

5.12 How many attempts at intubation were made? This is the number of times the tracheal tube was inserted into the mouth.

*For guidance please see back cover

5.13 Which tracheal tube size was used at the first attempt?

5.14 Was any other tube size attempted? Yes No

If Yes, which sizes? _____

5.15 Please state which of the following items of airway equipment were used, and in which order (mark 1,2,3 etc). In the second column please indicate if the item was unavailable.

	Order of Use (mark 1,2,3 etc)	Unavailable (please tick if yes)
Suction	<input type="checkbox"/>	<input type="checkbox"/>
Nasopharyngeal airway	<input type="checkbox"/>	<input type="checkbox"/>
Oropharyngeal airway	<input type="checkbox"/>	<input type="checkbox"/>
Gum Elastic Bougie	<input type="checkbox"/>	<input type="checkbox"/>
Laryngeal mask airway (LMA)	<input type="checkbox"/>	<input type="checkbox"/>
Intubating LMA	<input type="checkbox"/>	<input type="checkbox"/>
ProSeal LMA	<input type="checkbox"/>	<input type="checkbox"/>
Short handled Macintosh laryngoscope	<input type="checkbox"/>	<input type="checkbox"/>
Long blade Macintosh laryngoscope	<input type="checkbox"/>	<input type="checkbox"/>
McCoy laryngoscope	<input type="checkbox"/>	<input type="checkbox"/>
Polio Blade laryngoscope	<input type="checkbox"/>	<input type="checkbox"/>
Fibreoptic bronchoscope	<input type="checkbox"/>	<input type="checkbox"/>
Percutaneous cricothyroidotomy kit	<input type="checkbox"/>	<input type="checkbox"/>
Other – please state below	<input type="checkbox"/>	<input type="checkbox"/>

5.16 Was bag and mask ventilation commenced? Yes No

If Yes, did oxygenation improve? Yes No

5.17 Was capnography used during induction/maintenance of anaesthesia? Yes No

5.18 What was the oxygen saturation before pre-oxygenation? %

5.19 What was the lowest recorded oxygen saturation after induction? %

5.20 How was the failed intubation managed?

Surgery continued with alternative airway device Yes No

If Yes, please state which _____

Patient woken and surgery abandoned? Yes No

If Yes, how was the case subsequently managed?

General anaesthetic administered by another anaesthetist Yes No

If Yes, grade of anaesthetist _____

Regional technique? Yes No

Other Yes No

If Other, please specify _____

5.21 Was a cricothyroidotomy performed?

Yes No

If Yes, was this by

IV cannula Specific cricothyroid needle device Surgical airway Other

If Other, please specify _____

Was it performed by (*please tick*)

Surgeon Anaesthetist

Grade of operator _____

Was patient

Conscious Unconscious

Section 6: Outcomes

Section 6a: Woman

6a.1 Was the woman admitted to ITU/HDU?

Yes No

If Yes, duration of stay (days)

Or Tick if woman is still in ITU/HDU

Or Tick if woman was transferred to another hospital

6a.2 Did the patient aspirate?

Yes No

6a.3 Did any other major maternal morbidity occur?^{8*}

Yes No

If Yes, please specify _____

6a.4 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?

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

/ / :
24hr

6b.2 Mode of delivery

spontaneous vaginal ventouse lift-out forceps rotational forceps

breach pre-labour caesarean section caesarean section after onset of labour

6b.3 Birthweight

g

6b.4 Was the infant stillborn?

Yes No

If Yes, was this

Antepartum OR Intrapartum

Please go to section 7

6b.5 5 min 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:

Pre-eclampsia (hypertension and proteinuria)

Eclampsia

Thrombotic event

Amniotic fluid embolism

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

3: Previous or pre-existing maternal medical problems, including:

Essential hypertension

Cardiac disease (congenital or acquired)

Renal disease

Connective tissue disorders

Rheumatological disorders

Any congenital facial abnormalities or trauma

Endocrine disorders e.g. hypo or hyperthyroidism, acromegally

Psychiatric disorders

Haematological disorders e.g. sickle cell disease, diagnosed thrombophilia

Inflammatory disorders e.g. inflammatory bowel disease

Polycystic ovary syndrome

Epilepsy

Diabetes

Autoimmune diseases

Cancer / previous radiotherapy

4: Mallampati classification

This classification describes the anatomical structures visualised with maximal mouth opening and tongue protrusion in the sitting position.

Class I: soft palate, fauces, uvula, pillars

Class II: soft palate, fauces, portion of uvula

Class III: soft palate, base of uvula

Class IV: hard palate only

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. Cormack and Lehane

This classification describes the best view possible at laryngoscopy.

Grade I: complete glottis visible

Grade II: anterior glottis not seen

Grade III: epiglottis seen, but not glottis

Grade IV: epiglottis not seen

8. Major maternal medical complications, including:

Persistent vegetative state

Cardiac arrest

Cerebrovascular accident

Adult respiratory distress syndrome

Disseminated intravascular coagulopathy

Pulmonary oedema

Mendelson's syndrome

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

Severe infection e.g. septicaemia, meningitis

Exchange transfusion