

OXIMETER LOGBOOK AND AUDIT

After working through the manual and learning about the pulse oximeter, it is recommended that you use the pulse oximeter on all your patients and that you record details of their anaesthetics in the logbook. The logbook takes only a few seconds to fill out and will help you identify areas in which you can improve your anaesthesia care.

The logbook records the type of surgery performed, the kind of anaesthesia and the lowest saturation that was recorded. As you get more used to the oximeter and responding appropriately to the readings, you should see the number of patients who become desaturated decrease. Share your experience with your colleagues.

In order to understand how to complete the logbook, try filling in the logbook for the following cases:

1. A 6-year-old child under ketamine anaesthesia for reduction of a dislocated elbow. Saturations remained above 95% at all times.
2. A 23-year-old adult induced with thiopentone and then maintained on halothane anaesthesia under face mask for incision and drainage of a thigh abscess. At incision he developed laryngospasm and his saturations fell to 77%. He improved with airway management and additional oxygen.
3. In recovery, a normally fit 45-year-old patient developed a saturation of 82% lying on his back following an elective laparotomy. Anaesthesia was with tracheal intubation following thiopentone and suxamethonium. Maintenance was with ether. He improved when turned on his side and his airway was opened.
4. A 22-year-old patient undergoing emergency Caesarean section under spinal anaesthesia developed a saturation of 92% with mild difficulty in breathing. Her airway and breathing were satisfactory. BP was 75 mmHg systolic. She responded to left lateral tilt, oxygen and fluid.

GLOBAL OXIMETRY LOGBOOK: Name: _____

Hospital: _____

Date	Patient initials	Age	ASA Score	Operation	Anaesthesia	Lowest SpO ₂ during case	If the SpO ₂ fell below 90%, why did this happen and what did you do to correct it?	Patient Outcome	If LSCS, outcome for baby
1/2/09	AA	6	1E	MUA elbow	K, O ₂	95%	N/A	G	
1/2/09	BB	23	1E	I&D	Hal, O ₂ , STP	77%	Laryngospasm – anaesthesia deepened and 100% oxygen given	G	
1/2/09	CC	45	1	Laparotomy	TT, hal, O ₂ , STP, sux	82%	In recovery obstructed airway – turned on side and given O ₂ . Nurse to watch carefully	G	
1/2/09	DD	22	1E	CS	Sp	92%	High spinal with hypotension – BP 75/40. Breathing OK, extra O ₂ and ephedrine	G	G

Anaesthesia: Sp = spinal; O₂ = oxygen; hal = halothane; iso = isoflurane; E = ether; K = ketamine; STP = thiopentone; sux = suxamethonium; panc = pancuronium; atra = atracurium; P= pethidine; morph = morphine; Fent = fentanyl; TT = tracheal tube; FM = Facemask; LMA = Laryngeal mask; IPPV or SV (spontaneous ventilation)

Patient outcome: G = good; D = died in theatre; D 24 = died in first 24 hours

Outcome for baby: G = good; S = stillborn; D = died in theatre; D 24 died in first 24 hours

PLEASE TURN OVER THE PAGE

The American Society of Anesthesiologists' Classification of Physical State:

This is used worldwide as a simple way for anaesthetists to describe the physical state of their patients before surgery. Allocate your patient an ASA grade when you assess them preoperatively.

ASA Grade 1	A fit healthy patient
ASA Grade 2	A patient with minor disease, such as mild hypertension, mild anaemia or mild asthma.
ASA Grade 3	A patient with severe disease that limits their activity, such as untreated diabetes, breathlessness or heart disease.
ASA Grade 4	A patient with disease that is a constant threat to life, such as eclamptic fits or malignant hypertension.
ASA Grade 5	A moribund patient not expected to survive with or without an operation, such as a patient with septic shock in whom the blood pressure is unrecordable.

Addition of 'E' indicates that this was an emergency operation, for instance a patient with a ruptured uterus in whom the blood pressure is unrecordable is designated as ASA 5E.

During anaesthesia for these 10 patients, were there any problems with the oximeter or the probe? YES/NO

If yes, please describe what the problems were:

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Did any of these patients die in theatre or within the first 24 hours? YES/NO.

If yes, please indicate which patient and describe what happened:

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