



# Guideline on pre-anaesthesia consultation and patient preparation

## 1. Purpose

The purpose of this document is to assist practitioners to ensure that patients are adequately assessed, prepared, and have given consent for the recommended treatment. It recognises the integral role of the pre-anaesthesia consultation to improved outcomes, as well as coronial recommendations highlighting poor outcomes associated with inadequate pre-anaesthesia assessment.

In addition, it is essential that patients are appropriately selected for the facility in which their procedure is to be performed, taking into consideration their co-morbidities and the services and support available in the facility. The facility should be appropriately staffed and equipped both for the provision of anaesthesia and surgery as well as throughout the period of post-operative hospitalisation (see also *PG15(POM) Guideline for the perioperative care of patients selected for day stay procedures* and *PG29(A) Guideline for the provision of anaesthesia care to children*).

## 2. Scope

This document is intended to apply to all anaesthetists planning to administer either major regional analgesia (see *PG03(A) Guideline for the management of major regional analgesia*) or anaesthesia<sup>1</sup>. However, this guideline should be followed by any practitioner responsible for administering drugs that have the potential for alteration of a patient's conscious state, at all levels of sedation through to general anaesthesia, as well as techniques requiring the use of large volumes of local anaesthetic (see *PS02(A) Position statement on credentialling and defining the scope of clinical practice in anaesthesia*).

The executive summary and recommendations of *Safety of Anaesthesia: A review of anaesthesia-related mortality in Australia and New Zealand 2009-2011*<sup>8</sup> should also be noted because of its emphasis on the importance of adequate preoperative assessment.

## 3. Background

Adequate pre-anaesthesia consultation has been identified as an important factor in patient safety. The terms "pre-anaesthesia consultation" and "anaesthesia" in this document refer not only to situations pertinent to the administration of general anaesthesia but also includes those related to regional anaesthesia/analgesia and sedation. Consultation with a patient prior to anaesthesia by an anaesthetist or a medical practitioner whose scope of practice includes anaesthesia is essential (see *PS57(A) Position statement on duties of specialist anaesthetists*, *PS59(A) Position statement on roles in anaesthesia and perioperative care*, and *Good medical practice: A code of conduct for doctors in Australia*<sup>1</sup>).

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<sup>1</sup> For sedation, some recommendations will differ from those for anaesthesia and are contained within *PG09(G) Guideline on sedation and/or analgesia for diagnostic and interventional medical, dental or surgical procedures* applies.

“Consultation” differs from “assessment” in that an assessment (medical or nursing) contributes to the establishment of the health status of a patient at a particular point in time whereas consultation (medical) involves an assessment as part of a broader process that also includes:

- 3.1 ensuring that the patient’s state of health has been optimised
- 3.2 preparing a plan of perioperative management
- 3.3 allowing discussion with the patient and/or guardian
- 3.4 obtaining informed consent for the anaesthesia and related procedures.

Anaesthetists and medical practitioners undertaking to provide anaesthesia should be familiar with the principles outlined in the Medical Board of Australia’s *Good medical practice: A code of conduct for doctors in Australia*<sup>1</sup> and the New Zealand Medical Council’s *Good medical practice*<sup>2</sup>. An awareness of patient autonomy and patients’ rights to privacy as set out by the Privacy Act 1993 (NZ)<sup>3</sup>, the Privacy Act 1998 (Cth)<sup>4</sup> and the Privacy Amendment (Private Sector) Act 2000 (Cth)<sup>5</sup> is essential. In addition, anaesthetists should be familiar with *Supporting anaesthetists’ professionalism and performance: A guide for clinicians*, and *PS26(A) Position statement on informed consent for anaesthesia or sedation*.

These requirements are also reflected in the *New Zealand Code of Health and Disability Consumers’ Rights*<sup>6</sup> issued by the New Zealand Health and Disability Commissioner, and the *Australian Charter of Healthcare Rights*<sup>7</sup> (endorsed July 2008).

#### 4. General principles

- 4.1 The process involved in delivering a safe and effective pre-anaesthesia consultation will vary with the type of practice and environment in which the medical practitioner responsible for the anaesthesia works.
- 4.2 The difficulties of undertaking an adequate pre-anaesthesia consultation for patients admitted on the day of their surgery or medical procedure should be recognised. Ideally such patients should be reviewed prior to admission. Otherwise, admission times, list planning and session times should accommodate the extra time required for pre-anaesthesia consultations (see *PG15(POM) Guideline for the perioperative care of patients selected for day stay procedures* and *PG29(A) Guideline for the provision of anaesthesia care to children*).
- 4.3 As part of a pre-admission process, written or computer-generated questionnaires, screening assessments, or documented telephone assessments by medical or nursing staff may be used to supplement the consultation as long as the requirement of 4.4 is followed.
- 4.4 Even if a preliminary pre-anaesthesia assessment has been performed by some other person, the anaesthetist or medical practitioner responsible for administering the anaesthesia should be satisfied that all elements of that assessment have been adequately addressed, and if necessary, repeat any elements about which there may be doubt.
- 4.5 The consultation should take place at a time prior to anaesthesia and the planned procedure that allows for adequate consideration of all factors related to assessment and optimisation for surgery, anaesthesia and pain management. This includes the ability to obtain critical information about medication history, which may require liaising with hospital pharmacists and clinicians from other disciplines involved in the management of patients.

This is particularly important where:

- 4.5.1 there is significant patient co-morbidity

- 4.5.2 major surgery is planned
- 4.5.3 there are specific anaesthesia and pain management concerns
- 4.6 In some circumstances, early consultation will not be possible (e.g. emergency surgery, labour ward, and in emergency and critical care departments) but the consultation should not be omitted except when the overall welfare of the patient is at risk.
- 4.7 Pre-anaesthesia consultation facilities should include equipment, hand washing/disinfecting facilities (see *PG28(A) Guideline on infection control in anaesthesia*) and space to allow for a consultation and clinical examination in privacy, as well as support people if required by the patient. An equipped consulting room or single bed hospital room is ideal. For elective procedures, it is not appropriate for this consultation to occur in the operating theatre. Under certain circumstances, such as emergency surgery the consultation may occur in the holding/waiting bay or anaesthesia room. In situations, where the practitioner is confident that there has been thorough preoperative assessment, and verbal specialist consultation (as per 4.3, 4.4 and 4.5 above) the assessment and consultation process may be completed in the anaesthesia room. It is essential that issues regarding facilities, patient confidentiality, privacy, the presence of support people if required, autonomy, religious and cultural sensitivities, and patient questions are adequately addressed (see also *PS26(A) Position statement on informed consent for anaesthesia or sedation* and *the Australian Society of Anaesthetists ASA-PS03 Minimum facilities for pre-anaesthesia consultations*<sup>9</sup>).
- 4.8 It is unacceptable for any patient under the care of an anaesthetist to be left unattended for the purpose of a pre-anaesthesia assessment and consultation. Should it be necessary to undertake a pre-anaesthesia assessment and consultation whilst managing a patient under anaesthesia, strict compliance with *PS53(A) Position statement on the handover responsibilities of the anaesthetist*, as outlined under item 2. Protocol for transfer of responsibility during anaesthesia is essential.

## 5. Recommendations

The pre-anaesthesia consultation should include:

- 5.1 Identification and introduction of the medical practitioner performing the consultation.
- 5.2 Confirmation with the patient of the patient's identity, the proposed procedure(s) including site(s) and side, and the proceduralist involved.
- 5.3 A medical assessment of the patient including relevant medical history, which may be assisted by a questionnaire and/or review of relevant patient records, clinical examination, review of medications and review of the results of relevant investigations. Particular attention should be paid to any history of anaphylaxis or serious drug reactions (refer to *PG51(A)* and *PG60(POM)*) as well as to the presence of any cardiac implantable electronic devices<sup>2</sup>.  
  
Further investigations and/or therapeutic interventions may be considered necessary to optimize the patient's physical status and mental wellbeing. Thus, the medical assessment may lead to delay, postponement, reappraisal or even cancellation of the planned procedure.
- 5.4 Review of previous anaesthesia records if indicated. On occasions it may be necessary to obtain these from another medical facility.

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<sup>2</sup> Recommendations for perioperative management can be found below, under further reading.

- 5.5 Consultation with professional colleagues if required.
- 5.6 Consideration of the facilities, equipment, and staffing with respect to the proposed procedure and patient co-morbidities to ensure that appropriate levels of care are available throughout the patient admission: preoperative, intraoperative and postoperative. Prior to any procedure the anaesthetist should be satisfied that necessary postoperative monitoring and staffing, both in terms of numbers and skill set, are available.
- 5.7 Provision to the patient (and/or guardian) in a timely manner, of information of significance to the patient including details regarding the conduct of the anaesthesia/sedation, pain management (see *PS45(G) Position statement on patients' rights to pain management and associated responsibilities*) and relevant potential complications and risks. This material may be in the form of verbal discussion, written pamphlets, electronic information or internet links, which can only be effective should be if given to the patient ahead of the proposed procedure to allow time for consideration. In addition, the patient should be provided with an opportunity for questions on, and discussions about, issues of concern to them. An interpreter should be provided if necessary.
- 5.8 Obtaining informed consent for anaesthesia/sedation and related procedures. This should include consent regarding the type of anaesthesia, invasive procedures, blood and product transfusion if appropriate, procedures and plans for pain management, and where pertinent, informed financial consent (see *PS26(A) Position statement on informed consent for anaesthesia or sedation*). Where consent has been obtained in a pre-anaesthesia assessment clinic the procedural anaesthetist should still discuss the proposed treatment with the patient to ensure that all required preparation and explanation has occurred.
- Provision of additional information to patients intending to breastfeed should be guided by Appendix 2 below.
- 5.9 The provision of information regarding medication management and ordering/modification/cessation of any additional medications considered necessary. Consideration should be given to collaboration with perioperative physicians and pharmacists where necessary.
- 5.10 Instructions for fasting according to Appendix 1 below unless otherwise specifically prescribed by the anaesthetist.
- 5.11 Provision of further information such as escort requirements on discharge. Patients undergoing day-stay procedures with anaesthesia or sedation should be discharged into the care of a responsible person in accordance with recommendations as set out in *PG15(POM) Guideline for the perioperative care of patients selected for day stay procedures*.
- 5.12 As part of the anaesthetist's role in health advocacy, as well as in optimal preparation or surgery, the pre-anaesthesia consultation is a valuable opportunity to encourage and educate patients regarding modifiable health factors such as encouraging smokers to quit (see *PG12(POM) Guideline on smoking as related to the perioperative period*).
- 5.13 The pre-anaesthesia consultation should identify and take note of any advanced care directives. In their absence the consultation may represent an appropriate opportunity to recommend consideration of such directives, where relevant.
- 5.14 Contemporaneous written notes documenting the consultation and informed consent should become part of the medical record of the patient (see *PG06(A) Guideline on the anaesthesia record* and also *PS26(A) Position statement on informed consent for anaesthesia or sedation*).

**This document is accompanied by a background paper (PG07(A)BP) which provides more detailed information regarding the rationale and interpretation of the Guideline.**

## Appendix 1 - Fasting guideline

This fasting guideline applies to patients undergoing general anaesthesia, major regional anaesthesia/analgesia and sedation.

The aim of fasting prior to anaesthesia or sedation for a surgical or medical procedure is to decrease the risk of perioperative regurgitation, which may result in aspiration syndrome. This may be associated with chemical pneumonitis, bacterial pneumonia or airway obstruction depending upon whether foreign material (food) and/or gastro-intestinal fluids (gastric acid, bile or other bowel contents) have been aspirated into the lungs. Such patients may require treatment in critical care units.

Prolonged fasting from fluids for more than 6 hours fails to achieve an optimally empty stomach and may have deleterious metabolic effects as well as an impact on patient well-being. Continued consumption of clear fluid, in particular carbohydrate rich fluid, may improve gastric emptying as well as mitigate the metabolic and psychological impact of fasting. Fasting instruction should therefore take into account the timing of anaesthesia or sedation. A safe upper limit for recommended fluid volume has not yet been clearly identified, and will vary from patient to patient. However studies have shown that, in adults, it is safe to administer up to 400 mL of clear fluids 2 hours prior to surgery. The practice of "fasting from midnight" for a morning procedure is appropriate for solids but not appropriate for clear fluids in most circumstances.

Clear fluids are regarded as water, carbohydrate rich fluids, specifically developed for perioperative use, pulp free fruit juice, clear cordial, black tea and coffee. It excludes fluids containing particulate matter, soluble fibre, milk-based drinks and jelly.

The recommendations are as follows:

- i. For adults having an elective procedure, limited solid food may be taken up to six hours prior to anaesthesia and clear fluids may be taken up to two hours prior to anaesthesia.
- ii. For children over six months of age having an elective procedure, limited solid food or formula may be given up to six hours, breast milk up to four hours and clear fluids (no more than 3ml/kg/hr) up to one hour prior to anaesthesia.
- iii. For infants under six months of age having an elective procedure, formula may be given up to four hours, breast milk up to three hours and clear fluids (no more than 3ml/kg/hr) up to one hour prior to anaesthesia.
- iv. Prescribed medications may be taken with a sip of water less than two hours prior to anaesthesia unless otherwise directed (for example oral hypoglycaemics and anticoagulants).
- v. An H<sub>2</sub>-antagonist, proton pump inhibitor or other agent that decreases gastric secretion and acidity should be considered for patients with an increased risk of gastric regurgitation.

This fasting guideline may not apply to patient groups at increased risk of perioperative regurgitation or vomiting. This includes patients having emergency procedures and those with known/suspected delayed gastric emptying or oesophageal motility disorders, and obstetric patients in labour. Patients who have had bariatric surgery (in particular those with adjustable gastric bands) may also fall into this category. The practitioner responsible will need to exercise discretion regarding adequacy of fasting times versus the risk of aspiration and may choose to vary from this guideline to reduce risk for individual patients. It may be necessary to delay the planned procedure and/or use airway protective manoeuvres, both physical and pharmacological to further mitigate the risk of regurgitation.

Chewing gum should be discarded. This is primarily due to its risk as a foreign body rather than increased gastric content.

## Appendix 2 – Effect of anaesthesia on breastfeeding

ANZCA supports a culture of inclusion and diversity. This appendix applies to all patients who intend to provide breast milk for infants following anaesthesia/sedation, including procedures facilitating delivery, as well as those performed on patients who are already breastfeeding.

The purpose of this appendix is to support anaesthetists in providing contemporary pre-anaesthesia information and peri-operative care to patients intending to breastfeed following their procedure.

The term “breastfeeding” is used to refer to both breastfeeding and the use of expressed breast milk (EBM) to tube feed or bottle feed infants. Breastfeeding has significant health benefits for breastfeeding women and their infants and is recommended from birth for 6-12 months or longer, according to preference<sup>10</sup>. Previously, patients have been advised to delay breastfeeding after anaesthesia (“pump and dump”) for 24 hours, due to concerns regarding transfer of medication via breast milk. With further pharmacokinetic information and documented experience now available, this advice is no longer applicable.

Most medications used in anaesthesia are transferred in small amounts to breast milk. Concerns about infant effects relate to four elements.

**1. Amount transferred:** The Relative Infant Dose (RID)<sup>11</sup> measures the percentage of any medication per day that results in the breastfed infant when the medication is administered to the breastfeeding parent. Medications are considered “safe” if the RID is <10%. Most medications used in anaesthesia have a very low RID<sup>12</sup>.

**2. Oral bioavailability in the infant:** of the medication or its metabolites once transferred via the breast milk.

**3. Metabolism and clearance by the infant.** Hepatic and renal medication metabolism and clearance systems are influenced by gestational age, postnatal age and body weight<sup>13</sup>.

**4. Effects of medication/active metabolites on infants:** Many medications used in anaesthesia may cause undesirable effects on infants, including sedation or respiratory depression, which can be exacerbated by large or repeated doses.

**Recommendations** for peri-operative care and pre-anaesthesia advice to patients intending to breastfeed:

- i. Desirable structures and systems that support continuation of breastfeeding peri-operatively include: physical spaces to express breast milk; facilities to safely store breast milk; access to experts in infant feeding; operating and recovery service policies that limit periods of separation of the breastfeeding parent and infant.
- ii. Practical points to consider include:
  - breastfeeding or expressing just prior to anaesthesia to prevent breast engorgement
  - if separation is anticipated to exceed the duration between feeds then breastmilk can be expressed and stored ahead of the procedure
  - an alternative carer for the infant should be arranged when opioid analgesia is anticipated<sup>14</sup>.
- iii. Relative benefits of different anaesthesia techniques should be discussed with patients, aiming to optimise early return of consciousness; control of pain, nausea and vomiting; and facilitate same-day discharge if planned.
- iv. Patients should be advised that most medication used in anaesthesia and analgesia will pass in small amounts to the breast milk but are not likely to cause adverse effects on the infant.
- v. Provision of analgesia facilitates breastfeeding; however, post-procedural opioid administration should be minimised and consideration given to instituting multi-modal analgesia techniques. If required, short courses of opioids are preferable to poor analgesia. Where repeated doses of opioid medication are administered, hospital staff and carers should be advised to monitor infants for signs of sedation. Sedation in the breastfeeding parent should prompt assessment of their infant<sup>13</sup>.

Premature neonates may be at higher risk for apnoeas<sup>15</sup>. Infants of breastfeeding parents on long-term opioids as management of opioid-use disorder should be observed for neonatal abstinence syndrome<sup>16</sup>.

- Advice on specific opioids: Tramadol and codeine are pro-drugs and considerable inter-individual variation in breastfeeding parent and infant metabolism can lead to unpredictable levels of active metabolite in the breastfeeding parent and thus in the breast milk. In 2017 The Society for Paediatric Anaesthesia in New Zealand and Australia (SPANZA) and the ANZCA Obstetric Special Interest Group published documents **in support of** continued careful and limited use of tramadol while breastfeeding:
  - [SPANZA Advisory on tramadol - Use of tramadol during breastfeeding and in the neonate](#) (2017)<sup>17</sup>
  - [Statement regarding the use of Tramadol in breastfeeding women](#) (2017)<sup>18</sup>

vi. Table 1. Commonly-used anaesthesia medications and the current Therapeutic Guidelines (eTG) categorisation for use in breastfeeding<sup>19</sup>. For other medications refer to eTG (Australia),<sup>19</sup> or the Drugs and Lactation Database (United States)<sup>20</sup>.

	<b>Medication</b>	<b>eTG Categorization</b>	<b>Other references</b>
Sedatives	Benzodiazepines	Compatible	Short-acting (midazolam) preferred over long-acting (diazepam)
Induction agents	Propofol	Compatible	
	Thiopentone	Compatible	
Inhaled agents	Volatile agents	*	Little information. Short adult serum half-life <sup>21</sup> .
Muscle relaxants and reversal	Suxamethonium	*	No information. Rapid adult metabolism. Poor lipid solubility, very low transfer to breast milk <sup>22</sup> .
	Rocuronium	*	Rapidly metabolized in adult circulation, very low transfer to breast milk <sup>23</sup> .
	Sugammadex	*	No information available. A large, highly polar molecule, low transfer to breast milk probable <sup>24</sup> .
Opioids	Morphine	Compatible, caution with slow-release preparations	
	Oxycodone	Use with caution	
	Codeine	Avoid	
	Tramadol	Compatible for short-term use	Product information recommends against use during breastfeeding <sup>25</sup> .  SPANZA supports the use of tramadol while breastfeeding <sup>17</sup> .



	Fentanyl	Avoid transcutaneous patch	
Co-analgesics	Paracetamol	Compatible	
	Ibuprofen	Compatible	
	Diclofenac	Compatible	
Local anaesthetics	Lignocaine	Compatible	
	Bupivacaine	Compatible	
Antiemetics	Metoclopramide	Compatible	
	Ondansetron	Compatible	
	Dexamethasone	Use with caution due to lack of data	Data on other steroids reassuring

\* No Therapeutic Guideline recommendation provided.

Drugs with emerging pharmacokinetic information:

Dexmedetomidine: this drug does not have a Therapeutic Guidelines breastfeeding recommendation. A pharmacokinetic study published in 2017 suggested a RID of 0.034%<sup>26</sup>. Further information is required<sup>27</sup>.

Tapentadol: the Therapeutic Guidelines recommendation is to avoid tapentadol use during breastfeeding due to lack of data. Unlike tramadol and codeine, tapentadol is not converted to active metabolites. Further information is required<sup>28</sup>.

### Related ANZCA documents

PS02(A) Position statement on credentialling and defining the scope of clinical practice in anaesthesia

PG03(A) Guideline for the management of major regional analgesia

PG06(A) Guideline on the anaesthesia record

PG09(G) Guideline on sedation and/or analgesia for diagnostic and interventional medical, dental or surgical procedures

PG12(POM) Guideline on smoking as related to the perioperative period

PG15(POM) Guideline for the perioperative care of patients selected for day stay procedures

PS26(A) Position statement on informed consent for anaesthesia or sedation

PG28(A) Guideline on infection control in anaesthesia

PG29(A) Guideline for the provision of anaesthesia care to children

PG41(PM) Guideline on acute pain management

PS45(PM) Position statement on patients' rights to pain management and associated responsibilities

PG51(A) Guideline for safe management and use of medications in anaesthesia

PS57(A) Position statement on duties of specialist anaesthetists

PS59(A) Position statement on roles in anaesthesia and perioperative care

PG60(POM) Guideline on the perioperative management of patients with suspected or prove hypersensitivity to chlorhexidine.

ANZCA Supporting anaesthetists' professionalism and performance: A guide for clinicians

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## Further reading

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