



Guideline on pre-anaesthesia consultation and patient preparation

Background Paper

1. Purpose of review

PS07 Guideline on pre-anaesthesia consultation and patient preparation (formerly PS07 Recommendations for pre-anaesthesia consultation and patient preparation) was last reviewed in 2008. The document review has incorporated the following events:

- 1.1 Updating the format to align with the other ANZCA professional documents.
- 1.2 Acknowledgement of changes in the regulatory environment, particularly Australian Health Practitioner Regulation Agency (AHPRA), Medical Board of Australia (MBA) and Medical Council of New Zealand (MCNZ) publications in the area of medical consultations.
- 1.3 Acknowledgement of scientific evidence of the benefits of timely preoperative assessment and management for issues such as cessation of smoking and treatment of anaemia.
- 1.4 South Australian Coroner's recommendations particularly in regard to higher risk patients having procedures performed in facilities that are capable of providing appropriate intra and post-operative care.
- 1.5 Fellow input regarding updating of fasting guidelines.
- 1.6 Recent media reports (2015) of adverse patient events in association with administration of large volumes of local anaesthetic drugs.

2. Background and discussion

2.1 Update and AHPRA

- 2.1.1 The title of PS07 has been changed from "Recommendations" to "Guidelines" for consistency with *A01 Policy for the development and review of professional documents* which describes the current categories of professional documents:

"Guidelines" offer advice on clinical and non-clinical aspects of the practice of anaesthesia and perioperative medicine, reflecting expert consensus and supported by other evidence when available.

"Policies" deal with matters within the authority and control of the college.

"Statements" define the position of the college on certain matters.

- 2.1.2 Since 2008 (last PS07 review) a number of new ANZCA professional documents have been developed (such as *PS59 Statement on roles in anaesthesia and perioperative care* promulgated in 2013) and others updated (*PS09 Guideline on sedation and/or analgesia for diagnostic and interventional medical, dental or surgical procedures*, *PS12 Guideline on smoking as related to the perioperative period* and *PS15 Guideline for the perioperative care of patients selected for day stay procedures*).
- 2.1.3 This review of PS07 also incorporates the latest data from *Safety of Anaesthesia: A review of anaesthesia-related mortality in Australia and New Zealand 2009-2011*¹. The reviewers also noted that Council is considering archiving the ANZCA Code of professional conduct.
- 2.1.4 Recent changes in the regulatory environment have also occurred with the formation of AHPRA and release of documents from the MBA and MCNZ. Of particular relevance are Section 2 “Providing good care”, Section 3 “Working with patients” and Section 4 “Working with other health care professionals” of the MBA document *Good medical practice: A code of conduct for doctors in Australia*² dated March 2014.
- 2.1.5 In this version of PS07, an important distinction has been made between an “assessment” and a “consultation”. One of the definitions of “consultation” from the Macmillan Dictionary is:
- “a meeting with an expert or a professional person to get advice or to discuss a problem, especially a meeting with a doctor”.
- This was thought to cover the intent of the document and differentiate the pre-anaesthesia consultation from a pre-admission assessment, which may be carried out by another medical practitioner (who may be a trainee from another specialty), a nurse practitioner or administrative staff.
- 2.1.6 This 2015 revision also includes the aim to cover all practitioners such as trainees, other medical specialists, dentists and other health practitioners (e.g. Nurses), who may be involved in the provision of “anaesthesia” (in its broadest definition). The following is noted under the Health Insurance Act 1973 (Cth)³ section 3, clause 3:
- “Where an anaesthetic is administered to a patient:
- (a) pre-medication of the patient in preparation for the administration of the anaesthetic; and
 - (b) pre-operative examination of the patient in preparation for the administration of the anaesthetic, being an examination carried out during the attendance at which the anaesthetic is administered;
- shall, for the purposes of this Act, be deemed to form part of the professional service constituted by the administration of the anaesthetic.”

2.2 South Australian Coroner’s recommendations

- 2.2.1 In February 2014 the South Australian Coroner handed down recommendations⁴ after investigating the deaths of two morbidly obese patients in a small private facility.

The recommendations include the following points:

- 2.2.1.1 Small private hospitals that have no on-site medical practitioners overnight, and no Intensive Care Unit backup should develop robust pre-admission processes in which higher risk patients are screened to ensure that they are not accepted for overnight admission unless they have been assessed as suitable for that facility by a medical specialist or anaesthetist, well in advance of the planned admission date.
- 2.2.1.2 The process by which higher risk patients are referred for pre-anaesthesia assessment is streamlined and last minute changes to operating lists resulting in a different anaesthetist taking over immediately before surgery should be avoided.
- 2.2.1.3 Awareness should be raised amongst medical practitioners and nurses about the inherent risks of postoperative respiratory depression occurring in obese patients in particular, who may or may not have a diagnosis of sleep apnoea and who are receiving, or have received, opioid analgesia.

2.3 Fasting guidelines

- 2.3.1 Several Fellows expressed concerns regarding the currency of ANZCA fasting guidelines (contained in *PS15 Guideline for the perioperative care of patients selected for day stay procedures*) including whether ASA 3 and 4 patients were more at risk, and the possibility of prolonged fasting resulting in potential deleterious effects on patients.
- 2.3.2 In 2011 both the American Society of Anesthesiologists (ASA) and the European Society of Anaesthesiology (ESA) produced updated fasting guidelines^{5, 6} based on consensus and literature review. The ESA in particular emphasized the need to avoid prolonged fasting and indeed encourage intake of clear fluids up to two hours prior to anaesthesia.
- 2.3.3 Specific mention has been made of “chewing gum” in the revised PS07. The risks of allowing gum are related more to the presence of a foreign body rather than increased gastric content. The Australian and New Zealand web-based anaesthetic incident reporting system (webAIRS) have published instances where chewing gum was noted as a cause of an adverse airway event.⁷
- 2.3.4 In view of the above issues, there was some discussion about creating a new policy document specifically on fasting guidelines. It was noted however that there are an increasing number of professional documents and they are not catalogued according to area of relevance. A decision was made to develop fasting guidelines as an appendix to PS07, as the pre-anaesthesia period of care is where instructions on fasting are given to patients. The intention is that this appendix can then be updated/amended as necessary without requiring a revision of the entire document.

At the next review of the appendix, consideration may be given to including the provision of clear carbohydrate rich fluids, specifically developed for peri-operative

use, up to two hours before an anaesthetic. There is not yet clear research indicating that these fluids are of proven benefit.

- 2.3.5 Bariatric surgery as a potential contributor to delayed gastric emptying/oesophageal motility disorder has also been included for specific consideration. There was discussion in particular about anecdotal and some European case reports regarding aspiration in patients with adjustable gastric bands.

2.4 Reports of adverse patient events in association with administration of large volumes of local anaesthetic

- 2.4.1 Under Section 3 Scope of PS07, the following statement appears:

“...these guidelines 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.”

- 2.4.2 In 2015, two highly publicized incidents of young patients suffering convulsions and /or cardiac arrest whilst undergoing procedures under local anaesthesia and “conscious” sedation occurred in NSW. At the time of this update of PS07, both incidents were under investigation.

- 2.4.3 The facilities in which these incidents occurred were not licensed for procedures that required more than “conscious” sedation.

- 2.4.4 Large volumes of local anaesthetic may be used in such facilities to avoid the need for deeper sedation or general anaesthesia. The term “large volumes” is meant to imply doses that are close to the upper limits of recommended dosage that could result in plasma levels that may cause systemic side effects (in particular to the cardiovascular and central nervous systems). The risk of inadvertent intravascular injection increases with increasing volumes, particularly where repeated injections are used for infiltration.

- 2.4.5 Regardless of the regulation and licensing of facilities, patient safety is paramount. Any facility in which large volumes of local anaesthetic are used needs to have the necessary equipment and staff who are adequately trained and skilled to deal with an adverse event.

- 2.4.6 The intent of the abovementioned clause in the Scope of PS07 is to highlight to practitioners involved that, similar to the SA Coroner’s recommendations, ensuring appropriate facilities for patient care includes planning for potential adverse outcomes. It ties in with the statement in section 2 Purpose:

“...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.”

2.5 The paediatric patient

There are specific age dependent considerations with respect to the pre-anaesthesia assessment and preparation of the paediatric patient. The location, nature and timing of the

medical assessment will need to consider the developmental stage, the level of awareness and understanding of the procedure as well as the anxiety level of the patient and the family. The consultation may vary from full informed consent with a child (although ability to sign consent will be determined by jurisdictional requirements), to consultation independent of the child due to age, understanding or anxiety levels. The assessment should build rapport and minimise anxiety in a manner which provides developmentally appropriate understanding of the anaesthetic process.

2.6 Breastfeeding and anaesthesia

Following publication of “Guideline on anaesthesia and sedation in breastfeeding women 2020”⁸ by the Association of Anaesthetists of Great Britain and Ireland (AAGBI) ANZCA considered whether it should be endorsed. After assessment in accordance with A02, endorsement was rejected.

Instead, it was decided to address the issue by developing an advisory document to be incorporated as a separate Appendix into *PS07 Guideline on pre-anaesthesia consultation and patient preparation*. The aim being to support anaesthetists in both the Australian and New Zealand context to provide contemporary pre-anaesthesia information and peri-operative care to patients intending to breastfeed following their procedure.

In Australia the Therapeutic Guidelines – Pregnancy and Breastfeeding provide evidence-based recommendations regarding the use of medications during breastfeeding (Table 1).⁹ In New Zealand, Medsafe provides product information for individual medications.¹⁰ The United States-based Drugs and Lactation Database provides drug-specific recommendations based on drug properties, even when lactation-specific pharmacokinetic evidence is lacking.¹¹

Most opioid medications pass into breast milk with the potential to cause respiratory depression and sedation in infants. There is conflicting information regarding use of specific opioid medications during breastfeeding, particularly codeine and tramadol, which have active metabolites and are subject to pharmacogenetic variations in metabolism. In 2017 The Food and Drug Administration (FDA, United States) recommended against the use of tramadol during breastfeeding. The Therapeutic Guidelines (Australia) consider tramadol compatible with short-term use during breastfeeding. The Society for Paediatric Anaesthesia in New Zealand and Australia (SPANZA)¹² and the ANZCA Obstetric Anaesthesia Special Interest Group¹³ **support the continued careful use of tramadol while breastfeeding.** Therapeutic Guidelines and accompanying product information recommend against the use of codeine during breastfeeding.^{9,10}

At the time of writing, there was considerable community debate around the language used to describe breastfeeding. All the references cited in the Appendix used the words “women”, “mother”, “breastfeeding” and “breast milk”. Consistent with ANZCA’s culture of inclusion and diversity, the words “patient” or “parent” have been used except when inconsistent with facts presented in the cited references. The words “breastfeeding” and “breast milk” have been used to reflect the correct anatomical terminology. It is understood that some may disagree with the terminology used.

3. Summary

PS07 was revised based on the advice from the document development group. The current revision has considered the pre-anaesthesia consultation in the context of its impact on safety and patient outcomes. The recommendations in the guidelines are based on the application of the general principles in recognition of recent changes in practices and demands, as well as advances in technologies.

Related ANZCA documents

A01 Policy for the development and review of professional documents

PS09 Guideline on sedation and/or analgesia for diagnostic and interventional medical, dental or surgical procedures

PS12 Guideline on smoking as related to the perioperative period

PS15 Guideline for the perioperative care of patients selected for day stay procedures

PS59 Statement on roles in anaesthesia and perioperative care

References

1. McNicol, L. (ed). Safety of anaesthesia: a review of anaesthesia-related mortality in Australia and New Zealand 2009-2011. Melbourne: Australian and New Zealand College of Anaesthetists, 2014. From: http://www.anzca.edu.au/resources/college-publications/pdfs/SOA%20Mortality%20Report_P4.pdf Accessed 28 September 2015
2. Medical Board of Australia. Good medical practice: a code of conduct for doctors in Australia. Canberra: Medical Board of Australia, 2014. From: <http://www.medicalboard.gov.au/Codes-Guidelines-Policies.aspx> Accessed 28 September 2015
3. Commonwealth of Australia. Health Insurance Act 1973 From: http://www5.austlii.edu.au/au/legis/cth/consol_act/hia1973164/ Accessed 12 October 2015
4. Coroner's Court of South Australia. Finding of Inquest. Adelaide 2014. From: <http://www.courts.sa.gov.au/CoronersFindings/Lists/Coroners%20Findings/Attachments/581/Ryan%20John%20William%20and%20WALTON%20Patricia%20Dawn.pdf> Accessed 12 October 2015
5. Practice Guidelines for Preoperative Fasting and the Use of Pharmacologic Agents to Reduce the Risk of Pulmonary Aspiration: Application to Healthy Patients Undergoing Elective Procedures *An Updated Report by the American Society of Anesthesiologists Committee on Standards and Practice Parameters* Anesthesiology 2011; 114:495–511 From: http://webcache.googleusercontent.com/search?q=cache:t_fpZWJR1WIJ:www.asahq.org/~media/Sites/ASAHQ/Files/Public/Resources/standards-guidelines/practice-guidelines-for-preoperative-fasting.pdf+&cd=9&hl=en&ct=clnk&gl=au&client=safari Accessed 29 September 2015
6. Smith I, Kranke P, Murat I, Smith A, O'Sullivan G, Søreide E, et al. Perioperative fasting in adults and children: guidelines from the European Society of Anaesthesiology Eur J Anaesthesiol 2011;28(8):556–569 From: http://www.oegari.at/web_files/dateiarchiv/editor/esa_fasting_guideline.pdf Accessed 29 September 2015

7. NM Gibbs, S Shanmugam, G Goulding, K Taraporewalla, M Culwick. Chewing gum in the preoperative fasting period: an analysis of de-identified incidents reported to webAIRS. *Anaesthesia and Intensive Care* 2016, 44(2):282-284
8. Mitchell J, Jones W, Winkley E, Kinsella SM. Guideline on anaesthesia and sedation in breastfeeding women 2020: Guideline from the Association of Anaesthetists. *Anaesthesia*. 2020;75:1482-1493.
9. Therapeutic Guidelines LTD. eTG Complete March 2021 Edition – Pregnancy and Breastfeeding. Melbourne, Australia.
10. Medsafe: New Zealand Medicines and Medical Devices Safety Authority. Ministry of Health, New Zealand Government. Available at: <https://www.medsafe.govt.nz/> Accessed 9/4/2021.
11. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); Available at: <https://www.ncbi.nlm.nih.gov/books/NBK501922/> Accessed 9/4/2021.
12. Society for Paediatric Anaesthesia in New Zealand and Australia. Tramadol and Breastfeeding: SPANZA's Advisory on Tramadol – Use of Tramadol during breastfeeding and in the Neonate 15 June 2017. Available at: <https://www.spanza.org.au/resources-links/guidelines/>
13. ANZCA Obstetric Special Interest Group. Statement regarding the use of Tramadol in breastfeeding women. July 2017. Available at: https://libguides.anzca.edu.au/ld.php?content_id=48310239

Further reading

Apfelbaum JL, Connis RT, Nickinovich DG, Pasternak LR, Arens JF, Caplan RA, et al. Practice advisory for preanesthesia evaluation: An updated report by the American Society of Anesthesiologists task force on preanesthesia evaluation. *Anesthesiology*. 2012;116(3):522-538.

Association of Anaesthetists of Great Britain and Ireland. AAGBI safety guideline: pre-operative assessment and patient preparation: the role of the anaesthetist. London: Association of Anaesthetists of Great Britain and Ireland, 2010. From: <http://www.aagbi.org/sites/default/files/preop2010.pdf> Accessed 28 September 2015

Australian Commission on Safety and Quality in Healthcare. Australian Charter of Healthcare Rights. Sydney: Australian Commission on Safety and Quality in Healthcare, 2008. From: <http://www.safetyandquality.gov.au/wp-content/uploads/2012/01/Charter-PDF.pdf> Accessed 28 September 2015

Australian Society of Anaesthetists. Position Statement Minimum Facilities for Pre-anaesthesia Consultation ASA-PS03 (2010) From: https://my.asa.org.au/ASA/Education_Events/ASA_Position_Statements/ASA/Education_and_events/ASA_Position_Statements/ASA_Position_Statements.aspx Accessed 28 September 2015

Hug CC, Jr. Rovenstine lecture: Patient values, hippocrates, science, and technology: What we (physicians) can do versus what we should do for the patient. *Anesthesiology*. 2000;93(2):556-564.

Jenkins K, Baker AB. Consent and anaesthetic risk. *Anaesthesia*. 2003;58(10):962-984.

Medical Council of New Zealand. Good medical practice. Wellington: Medical Council of New Zealand, 2013. From: <https://www.mcnz.org.nz/assets/News-and-Publications/good-medical-practice.pdf> Accessed 28 September 2015

National Health and Medical Research Council. General guidelines for medical practitioners on providing information to patients. Canberra: National Health and Medical Research Council, 2004. From: <https://www.nhmrc.gov.au/guidelines-publications/e57> Accessed 28 September 2015

Venn, PJ (ed). Guidelines for the provision of anaesthetic services (GPAS). London: The Royal College of Anaesthetists, 2015. From: <http://www.rcoa.ac.uk/node/17354> Accessed 29 September 2015

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In addition, the following were consulted:

Safety and Quality Committee

ANZCA regional and national committees

Australian Society of Anaesthetists

Faculty of Pain Medicine Board and regional committees

ANZCA Trainee Committee

Relevant Special Interest Groups (SIGs)

Expert group (Appendix 2)

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