



Post Operative Nausea and Vomiting Guideline

Effective: 3 August 2017

1. Background

Post-Operative Nausea and Vomiting (PONV) is a common cause of distress and dissatisfaction in patients. It can delay discharge from ambulatory surgery, increase unplanned hospital admission and delay inpatient discharge. Rare complications e.g. wound dehiscence, aspiration of gastric contents and oesophageal rupture has been reported. The incidence of PONV range from a reported 30% in all post-surgical patients to 80% in the high risk groups.

Nausea and vomiting is controlled by a poorly anatomically defined vomiting centre in the medulla. There are multiple stimulating input pathways to the vomiting centre including vagal afferents (from the eye, oropharynx, gastrointestinal tract and genitalia), higher cortical centres (emotions and smells), the vestibular apparatus (middle ear conditions and movement), endocrine (post-pubescent female) and chemoreceptor trigger zone.

Anti-emetic drugs have effect on different receptors in the neural pathways:

- 5 HT₃ receptor antagonist: ondansetron
- Neurokinin 1 receptor antagonist: aprepitant
- Corticosteroid: dexamethasone
- Dopamine 2 antagonist: droperidol, metoclopramide, prochlorperazine
- Butyrophenone: droperidol, haloperidol
- Anti-histamine: cyclizine, promethazine
- Anticholinergic: scopolamine

The aim of this document is to provide staff with a structured approach in the management of PONV.

Prevention of PONV begins in the pre-operative phase. The patient should be risk assessed and prophylaxis given to those identified with medium to high risk of PONV.

2. Guiding Principles

When nausea and vomiting occur post-operatively, principles of treatment are:

- Anti-emetic from a different pharmacological class to those used as prophylaxis should be used
- Repeating the medication given for PONV prophylaxis within the first 6 hours after the initial dose conferred no additional benefit.
- An emetic episode occurs more than 6 hours postoperatively can be treated with any of the drugs used for prophylaxis **except dexamethasone**.
- Consider side effect profile of anti-emetic drugs and tailor selection to individual patient
- Use first line before second line drugs.

3. Guideline

- The anaesthetist is to document “PONV Pathway” in the PRN section of the patient’s medication chart and sign under each anti-emetic on the separate PONV Pathway sheet (MR174A).
- Dose and time of prophylactic drugs used is recorded on the PONV pathway by the anaesthetist.
- All patients should have a nausea score documented in recovery and as per routine observations on the ward.
- If the nausea score is ≥ 1 and causing distress or delay in routine recovery e.g. commencement of oral fluids or mobility, then proceed to treat according to flow chart instruction on PONV pathway. Repeat score 15 minutes after anti-emetic administration.

Nausea score: 0 = no nausea
1 = nausea only
2 = one or two vomits within 15 minutes
3 = greater than two or continuous vomiting.

4. Definitions

PONV	Post-operative nausea and vomiting is defined as any nausea, retching or vomiting occurring during the first 24-48 hours after surgery.
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5. Roles and Responsibilities

The PONV Pathway is a guideline only. It is applicable to patients over two (2) years of age and is for use at the discretion of the anaesthetist, who may wish to chart alternative anti-emetics.

6. Compliance

Failure to comply with this guideline may constitute a breach of the WA Health Code of Conduct (Code). The Code is part of the [Employment Policy Framework](#) issued pursuant to section 26 of the [Health Services Act 2016](#) (HSA) and is binding on all WACHS staff which for this purpose includes trainees, students, volunteers, researchers, contractors for service (including all visiting health professionals and agency staff) and persons delivering training or education within WACHS.

WACHS staff are reminded that compliance with all policies is mandatory.

7. Evaluation

Review of the PONV pathway is to be conducted every three (3) years by the Clinical Lead of Anaesthesia and discussed at the Anaesthetic Reference Group meetings. The review should be based on current evidence.

8. Standards

[National Safety and Quality Health Care Standards \(1-10\) – 1.1.1](#)

[EQulPNational Standards \(11-15\) – 12.3.1](#)

9. References

1. Consensus guidelines for the management of post-operative nausea and vomiting, Anaesthesia Analgesia Jan 2014; vol 118:no1
2. Nausea and vomiting after surgery. British Journal Anaesthesia, Feb 2013; vol13: no1
3. Postoperative nausea and vomiting, adult protocol. Fremantle Hospital and Health Service nursing practice. November 2013
4. Protocol for the management of post-operative nausea and vomiting for children>24 months. Princess Margaret Hospital for Children, May 2012.

10. WA Health Policy Framework

[Public Health Policy Framework.](#)

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