Postoperative nausea and vomiting

The following is an extract from ***Standards and Recommendations for Safe Perioperative Practice*** **(Fifth Edition)**, Section 7.9 (Section title: Principles of Anaesthetics), published by the Association for Perioperative Practice.

STANDARD

Postoperative nausea and vomiting are managed effectively in the post-anaesthetic care unit (PACU).

Nausea, retching and vomiting may exist independently of each other and therefore should be assessed individually. There are a number of factors within surgery and anaesthesia that can produce postoperative nausea and vomiting (PONV) these include:

- Excessive preoperative fasting
- Use the lowest power setting possible
- Use of volatile anaesthetic agents, nitrous oxide and opioids
- Dehydration
- Type of surgery: cholecystectomy, gynaecological and laparoscopic procedures
- Gut distension
- Interference in the labyrinthine apparatus
- Longer duration of surgery.

The patient who experiences nausea and vomiting should be cared for in an empathetic and professional manner within the theatre environment. The patient should be discharged from the unit in a safe and stable condition.

RECOMMENDATIONS FOR LOCAL POLICY

7.9.1 Patients will receive guidance on the importance of preoperative fasting. There should not be an excessive starvation time (see section 7.2).

7.9.2 Patients at risk of PONV should be identified in the preoperative period using a risk screening tool (Apfel et al 2012, Smith & Ruth-Sahd 2016).

7.9.3 The management of PONV should be risk tailored. Patients at high risk of PONV should receive anti-emetic prophylaxis. The anaesthetic technique may need to be modified in accordance with drug choice or technique to reduce the risk of PONV (Gan et al 2014).

7.9.4 Patients who experience nausea and vomiting should be afforded privacy and dignity (DH 2010).

7.9.5 Tissues and facilities for washing and mouth cleansing should be provided for patients who experience PONV.

7.9.6 Drug therapy should be prescribed and administered for persistent or symptomatic PONV (Gan et al 2014).

7.9.7 A fan can be provided to agitate air for a cooling breeze around the patient, aiding patient comfort.

7.9.8 Oral care should be provided for hygiene and comfort.

7.9.9 Any vomiting must be recorded on the fluid balance chart, noting volume, colour, presence of blood etc.

7.9.10 If a nasogastric tube is in situ, any aspirate from this must be recorded. Aspiration via suction can be performed where necessary.

7.9.11 Reassurance should be given to the patient.

7.9.12 Non-pharmacological therapies such as acupressure may be helpful (Gan et al 2014) and can be delivered by appropriately trained staffed approved locally according to safe practice guidance.

7.9.13 Distraction therapies, regulated deep breathing techniques and aromatherapy can be used to help manage emesis (Sites et al 2014).

References and further reading

Apfel CC, Heidrich F, Jukar-Rao S et al 2012 Evidence-based analysis of risk factors for postoperative nausea and vomiting ***British Journal of Anaesthesia*** 109 (5) 742-753 [online] Available from: https://doi.org/10.1093/bja/aes276 [Accessed March 2021]

Department of Health 2010 **The Essence of Care: Benchmarks for the fundamental aspects of care** [online] Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216691/dh_119978.pdf [Accessed March 2021]

Gan TJ, Diemunsch P, Habib A et al 2014 Consensus Guidelines for the Management of Postoperative Nausea and Vomiting ***Anaesthesia & Analgesia*** 18 (1) 85-113 [online] Available from: https://doi.org/10.1213/ANE.0000000000000002 [Accessed March 2021]

Royal College of Anaesthetists 2019 Chapter 4: Guidelines for the provision of anaesthetic services for postoperative Care. In: **Guidelines for the Provision of Anaesthetic Services** [online] Available from: https://www.rcoa.ac.uk/safety-standards-quality/guidance-resources/guidelines-provision-anaesthetic-services [Accessed March 2021]

Shaikh SI, Nagarekha D, Hegade G, Marutheesh M 2016 Postoperative nausea and vomiting: A simple yet complex problem ***Anesthesia Essays and Researches*** 10 (3) 388-396 [online] Available from: https://doi.org/10.4103/0259-1162.179310 [Accessed March 2021]

Sites DS, Johnson NT, Miller JA et al 2014 Controlled breathing with or without peppermint aromatherapy for postoperative nausea and/or vomiting symptom relief: A randomized controlled trial ***Journal of PeriAnesthesia Nursing*** 29 (1) 12-19

Smith CA, Ruth-Sahd L 2016 Reducing the incidence of postoperative nausea and vomiting begins with risk screening: an evaluation of the evidence ***Journal of PeriAnesthesia Nursing*** 31 (2) 158–171