A clinical study: Pre and Post implementation of Guideline of Post Operative Nausea and Vomiting Treatment

Alex Chak(1), Choy WY (2), Law MS(3)
(1) Department of Anaesthesiology, Pain Medicine and Operating Services, United Christian Hospital (2) Department of Anaesthesiology and Intensive Care, Tuen Mun Hospital. (3) Department of Anaesthesiology and Operating theatre, Kwong Wah Hospital

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Introduction
Postoperative nausea and vomiting (PONV) is usually defined as nausea, retching or vomiting within 24 hours of surgery is well recognized as one of the most common problems after surgery, encountered in more than 30% of surgeries, or as high as 80% in certain high risk patients without prophylaxis. PONV also has a profound influence on patient satisfaction, quality of life and escalated health care costs as a result of prolonged nursing care, delayed discharge and unanticipated hospital admissions.6, 7 Evidence based local guideline towards improving assessment and treatment of PONV was decided (Appendix 1). There are currently few studies on the clinical usefulness PONV guideline in our locality. Therefore we would like to carry out a clinical study to evaluate the effectiveness of the newly established guideline

Objectives
Primary Objectives
Change in incidence of PONV before and after the implementation of the Guideline of Post Operative Nausea and Vomiting Treatment

Secondary Objectives
1. To assess the rate of using PONV guideline through thorough review of practice of anaesthesia, antiemetic prophylaxis and rescue treatment prescriptions
2. Patients’ outcome measurement with Anaesthetic recovery before and after guideline implementation
3. Costs of Antiemetic treatment before and after guideline implementation

Methodology
Awareness of prophylaxis and rescue treatment of PONV had been increased after implementation of the PONV guideline. Anaesthetic technique had been modified including reduced N2O use, increased use of antiemetic prophylaxis and rescue treatments. Incidence of immediate post operative PONV was increased as anaesthetic staff were more aware the problem and more willing to pick it up. The overall incidence of PONV in first 24hr post operation was comparable with
Result
A total of 798 subjects were involved in the audit. The incidence of PONV immediately postoperatively was significantly increased (2.42% vs 14.8%) after the implementation of the guideline. The incidence of PONV in the first 24 hr was 28.9%, it was more common in SDA/ in patient than Day surgery (33% vs. 5.7%), more common in ENT surgery (50%) followed by Gyn operation (36%) and more common in GA vs. Central neural block (30.8% vs. 23%). There was significantly reduced in use of N2O (p<0.001), increase used prophylaxis (p=0.0376), increased used of rescue therapy (p<0.001) after implementation of guideline. The average cost per patient had no significant changed (p=0.4085)