

Are guidelines for 'PONV alone' sufficient!

Rakesh Garg*

Department of Anesthesiology, Pain and Palliative Care, Dr BRAIRCH, AIIMS, New Delhi, India

***Corresponding author:** Rakesh Garg, Room No. 139, 1st floor, Department of Anaesthesiology, Pain and Palliative Care, Dr BRAIRCH, All India Institute of Medical Sciences, Ansari Nagar, New Delhi-110029, India, Tel: +91 9810394950; +91 9868398335; E-mail: drrgarg@hotmail.com

Citation: Rakesh, G. Are guidelines for 'PONV alone' sufficient! (2014) *J Anesth Surg* 1(1): 20-21.

Received date: December 20, 2014

Accepted date: December 23, 2014

Published date: December 28, 2014

Introduction

Postoperative nausea and vomiting (PONV) has always remained an important concern in the perioperative management. It remains one of the commoner adverse effect perioperatively. The risk ranges from 10% to 80%^[1-3]. PONV not only gives a patient dissatisfaction but also have impact on perioperative outcome, increased length of hospital stay and thus increases health care costs. Due to these concerns, ample number of clinical trials looking at the best treatment modality for prevention and treatment of PONV in perioperative period has been reported in the literature. As inherent limitation of a clinical trial remains evaluation of a specific end point with a specific primary outcome. The majority of PONV studies have observed some isolated parameters with regards to drug of antiemetic classes. This limits the impact of various factors and interaction among the multimodal management for PONV. Also recently, concerns have been raised with various PONV related studies and thus the reported outcome by these studies remains questionable. We have guidelines that talk of multimodal therapy for PONV and usually comprise of various classes of antiemetic in single or combination^[3]. What should be constituents of multimodal management of PONV? This remains unclear and not described comprehensively in guidelines for PONV in an algorithmic approach. Also, issues related to special group of patients requiring management of PONV like children, pregnant, stressful situations like trauma, post chemotherapy or on maintenance chemotherapy requiring surgical intervention needs to be emphasized^[2]. These groups are grey area regarding effective management for PONV in perioperative period.

The incidence of PONV is reportedly decreased in recent years. So do these imply that pharmacotherapy for PONV is optimal now after various reported literature and guidelines

for PONV? The other point that needs to be emphasized relates to evidence being reported for fasting guidelines which has been liberalized based in evidence for minimal fasting preoperatively and maintaining hydration perioperatively. The pain score has been adapted as sixth vital signs and thus needs to be monitored after surgical intervention. The pain management has also been revolutionized in last few years with the availability of improved techniques like use of ultrasound and nerve stimulator for nerve blocks but also due to availability of different drugs and adjuvant. Awareness about pain management using these modalities has also improved. It is well known fact that fluid restriction and pain aggravates PONV. We can infer from these that decrease in PONV incidence related to development related to fluid and pain management perioperatively. So this implies that we need to target PONV not as an individual identity but consider it as a spectrum of overall "Syndrome of PONV" management. This may be in analogy of metabolic syndrome, which comprises of obesity, hypertension, hypertriglyceridemia, low high-density lipoprotein cholesterol and hyperglycemia which are interrelated and managed as syndrome rather than individual pathology^[4]. Should PONV guidelines needs to be replaced with guidelines for management of "Syndrome of PONV"? We need to further explore this possibility.

It has been reported that acceptance and implementation of guideline related to PONV is a concern and thus may not achieve its impact. Guidelines for PONV management needs also to consider certain target endpoint for the syndrome to have satisfactory PONV control. The "satisfactory" endpoint remains questionable. Any occurrence of PONV would be unacceptable. Does this mean absolute "zero tolerance zone" for PONV in postoperative period? Recently Kranke expressed desires for "PONV - free Hospital"^[5]. This appears to be a dream in present scenario. But if we step forward for 'syndrome of PONV' rather than 'PONV alone', probably, incidence of PONV probably would see a reducing trend. This will be in corollary to Enhanced Recovery After Surgery where in rapid recovery is initiated with multipronged approach, starting from preoperative period and continued in postoperative management^[6,7]. Similarly "Syndrome of PONV" probably requires its initiation from preoperative period by minimizing fasting status, reducing anxiety, preventive analgesia to intraoperative multimodal analgesia technique and appropriate use of pharmacotherapy for PONV to be continued in postoperative period. Though some of these factors may have limited evidence for PONV but requires attention at appropriate time^[3]. Also, it is a time when routine nausea and vomiting score needs to be monitored in the postoperative period along with other vitals including pain score. However,

scoring system like Apfel score, Sinclair-score, Sarin model exists for PONV monitoring or risk assessment^[8,9]. These models are either too simplistic or do not incorporate multimodal factors for PONV. So we need to explore some comprehensive models not only for risk stratification but also includes various factors at different stages off surgery i.e. timing where PONV management needs to be initiated.

References

1. Smith, H.S., Smith, E.J., Smith, B.R. Postoperative nausea and vomiting. (2012) *Ann Palliat Med* 1(2): 94-102.
2. Roberts, S.M., Bezinover, D.S., Janicki, P.K. Reappraisal of the role of dolasetron in prevention and treatment of nausea and vomiting associated with surgery or chemotherapy. (2012) *Cancer Manag Res* 4: 67-73.
3. Gan, T.J., Diemunsch, P., Habib, A.S. et al. Consensus guidelines for the management of postoperative nausea and vomiting prophylaxis. (2014) *Anesth Analg* 118(1): 85-113.
4. Yao, W., Sun, Y., Wang, X., et al. High prevalence of metabolic syndrome in a middle-aged and elderly population with prehypertension in Tianjin. (2014) *Clin Exp Hypertens* 12: 1-6.
5. Kranke, P., Diemunsch, P. The 2014 consensus guidelines for the management of postoperative nausea and vomiting: a leap-frog towards a postoperative nausea and vomiting-free hospital. (2014) *Eur J Anaesthesiol* 31(12): 651-653.
6. <http://www.erassociety.org/>
7. Paton, F., Chambers, D., Wilson, P., et al. Effectiveness and implementation of enhanced recovery after surgery programmes: a rapid evidence synthesis. (2014) *BMJ Open* 4(7): e5015.
8. Sarin, P., Urman, R.D., Ohno-Machado, L. An improved model for predicting postoperative nausea and vomiting in ambulatory surgery patients using physician-modifiable risk factors. (2012) *J Am Med Inform Assoc* 19(6): 995-1002.
9. Pierre, S., Benais, H., Pouymayou, J. Apfel's simplified score may favourably predict the risk of postoperative nausea and vomiting. (2002) *Can J Anaesth* 49(3): 237-242.