

14 Evidence-based Practice and Quality Improvement

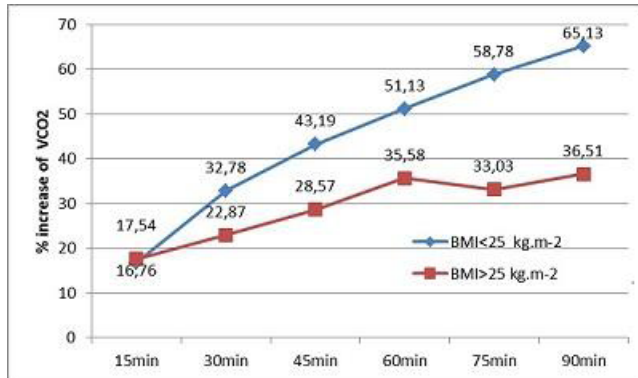
F- test (comparison of ratio of the variances) was used for statistical analysis.

Results and Discussion: Mean age was 47.4 ± 17.2 years, and mean BMI was 25.2 ± 5.2 kg.m².

Patients having BMI > 25 kg.m² showed significantly less VCO₂ increase ($p < 0.05$).

	n=	15min	30min	45min	60min	75min	90min
BMI < 25	31	16.76	32.78	43.19	51.13	58.78	65.13
BMI > 25	29	17.54	22.87	28.57	35.58	33.03	36.51
p		0.522	0.029*	0.019*	0.018	0.002*	0.003*

[% increase of VCO₂ during retroperitoneoscopy.]



[%increase of VCO₂ according to BMI]

This can be probably explained by two mechanisms secondary to increased retroperitoneal fat tissue in overweight patients. Fat tissue is poorly vascularised with a lower potential of CO₂ absorption. The presence of more retroperitoneal fat tissue might limit, through a mechanical effect, progressive retroperitoneal space dissection and expansion all through the surgery, caused by continuous insufflation, producing larger areas of CO₂ absorption.

Conclusion: Increased BMI seems to be a protective factor for CO₂ absorption during retroperitoneoscopic procedures.

References:

1. Ng C, Gill I, Sung G et al. *J Urol* 1999; 162: 1268-72.

1AP3-8

Using the post-operative quality recovery scale to evaluate recovery with different neuromuscular blocking reversal agents in the Portuguese population - interim analysis results

Gomes B., Lagarto F, Bismarck A., Rodrigues N., Nogueira M., Amorim P. *Centro Hospitalar do Porto-Hospital de Santo António, Dept of Anaesthesiology & Intensive Care, Porto, Portugal*

Background and Goal of Study: Post-operative Quality Recovery Scale (PQRS), is the first scale evaluating several domains of postoperative recovery. The objectives of this study were to compare overall and physiologic, cognitive, and functional domains of post-operative recovery after elective surgical procedures using neostigmine or sugammadex as neuromuscular blocking (NMB) reversal agents, to validate the use of PQRS in the Portuguese population and to objectively assess muscular strength recovery.

Materials and Methods: Prospective multicenter observational study comparing postoperative recovery between 2 cohorts of 50 adult patients submitted to elective surgical procedures with general anesthesia using Nondepolarizing Muscle Relaxants and NMB reversal with neostigmine or sugammadex. Measurements obtained using Portuguese version of PQRS at different timepoint: baseline, 15 minutes (T15), 40 minutes (T40), one and three days after surgery. Full recovery defined as return to values identical or higher than those measured at baseline, prior to surgery. Muscular strength measured with KERN- MAP® Dynamometer. Ethics Committees approval was obtained. Statistics used linear T-Test, Qui Square and Fisher exact test, data presented as mean ± SD for continuous variables. Interim analysis results presented

Results and Discussion: Thirty patients received neostigmine and 21 sugammadex. Age and BMI 50.4 ± 11.8 and 28.6 ± 5.6 in the neostigmine group and 38.2 ± 12.7 and 24.7 ± 4.5 in the sugammadex group ($p < 0.001$). Overall response rate at T15 was 86% for neostigmine and 95% for sugammadex ($p = 0.22$). Differences in favor of sugammadex group noted in nociceptive and emotional domains, 80 vs 100% respectively ($p = 0.04$). Overall response rate

at T40 was 80% for neostigmine and 65% for sugammadex ($p = 0.33$), primarily reflecting constraints on activities of daily life. Muscular strength did not differ. Improvements in recovery scores from T15 to T40 were observed in both groups, without significant differences. Postoperative assessments were feasible using PQRS at T15 and T40 and seem appropriate for comparisons between postoperative recovery domains and overall recovery. These preliminary results suggest nociceptive and emotional domains recovery at T15 may be faster with sugammadex.

Conclusion: The results support the adopted PQRS validation process and the potential of this scale as a tool for the evaluation of post operative recovery evaluation in the Portuguese population.

1AP3-9

Airway emergencies beyond theatres-on wards and on wards

Mir E. McPherson K., Ng K.C., Patel A.

Royal National Throat, Nose and Ear Hospital, Dept of Anaesthesiology, London, United Kingdom

Background and Goal of Study: The NAP 4 looked at airway emergencies outside theatres and the contributing factors. Patients presenting in the emergency department are managed by multidisciplinary teams. However, patients on the wards are managed by ENT teams or crash teams for any airway emergency.

The wards may not be adequately equipped to deal with airway catastrophes which is likely to contribute to morbidity and mortality. In the United States' 0.5% of emergency intubations required a surgical airway (the National Emergency Airway

Registry (NEAR). In a study in Scotland² 8.5% of those who had emergency intubations outside theatres had a Cormack and Lehane grade of 3-4. This necessitates regular training of staff and also a robust system of clinical governance and audit to ensure provision of appropriate equipment on wards for these emergencies. A national survey in 2006³ made recommendations for an Oxford box with equipment on ENT wards for airway emergencies.

We performed a survey to identify emergency airway equipment available on ENT wards and staff training on its use.

Materials and Methods: A telephone national survey was conducted across all acute trusts (164) in England and Wales.

Results and Discussion: 127 hospitals had inpatient ENT wards and were included in the survey. The Nurse in charge on each ENT ward was called. The response rate was 93% (118). 59% (75) had an airway tray or trolley. This included dedicated airway trolley or tray set up for patients with tracheostomies or post airway surgery. All wards had an allocated person for regular checks of the trolley. The contents of the trolley vary widely and only in 7.8% (10) of the wards the contents comply with the recommendations made for the Oxford box.

In 7% (9), the first port of call is the anaesthetist for any airway emergencies. In 52.7% (67) cardiac arrest team and in 29.9% (38) ENT teams are called first to manage any airway emergencies on the wards.

In 48% (61) there is no formal training for nursing staff for tracheostomy care. 12.5% (16) provide regular training sessions for the nursing staff. In 9% (12) formal training is given on induction but is not followed by regular sessions. In the remaining 19.6% (25) training is infrequent or once every 1-2 years.

Conclusion(s): Robust guidelines for standardisation of emergency airway equipment on the wards are needed. Nursing staff should have regular training in routine tracheostomy care and airway emergencies.

1AP3-10

Patient's satisfaction with anesthesia consultation: does it matter?

Madeira E, Madeira D., Cortesão J., Morgado T., Tavares E.

Centro Hospitalar e Universitário de Coimbra - Hospital Geral, Dept of Anaesthesiology & Intensive Care, Coimbra, Portugal

Background: Preoperative evaluation of patients should be carried out with enough time before the scheduled procedure¹ and this is a standard of care in our hospital. However, studies about quality of the service offered to patients are lacking and the literature is scarce about this subject. Patient satisfaction has become an importante component of quality improvement² and it remains the best way to assess the outcome from the point of view of the patient³.

The aim of this study was to assess patient satisfaction with anesthesia consultation by means of a questionnaire developed to this purpose.

Materials and Methods: Prospective study with a questionnaire (16 questions) extended over a period of four months. The inquiry form took place