

PRACTICE OF TIVA vs VOLATILE GAS ANAESTHESIA AT NATIONAL SCIENTIFIC AND PRACTICAL CENTRE OF EMERGENCY MEDICINE (NSPCEM)

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Introduction: Comparative assessment of economic impact and patients' outcome between Inhalation vs. Total Intravenous Anesthesia (TIVA) techniques is well debated in literature. In the Republic of Moldova, due to economic issues, the anesthesiologists haven't used for more than 15 years Inhalational Anesthesia (IA) techniques. One year ago the IA technique of anesthesia was revived at NSPCEM. Due to this fact it was very important to find out if IA had any impact on the quality of health services rendered at NSPCEM.

Materials and Methods: It is a prospective observational study, approved by the Science Ethics Committee of Moldova State University of Medicine and Pharmacy "Nicolae Testemițanu". Written informed consent, to participate in the study, was obtained from 41 patients. Patients were randomized in two groups according to the technique of anesthesia TIVA and IA. All patients underwent laparoscopic cholecystectomy. During the study, the research team collected quantitative and qualitative data regarding used techniques of anesthesia and patient safety issues. The statistical analysis was performed using SPSS 17 software.

Results: The study lots are similar from the demographic point of view. According to results of our study there are no differences between the study groups in the terms of: length of anesthesia ($p=0.253504$), use of intravenous anesthetics drugs thiopental ($p=0.519761$), midazolame ($p=0.349021$); neuro-muscular blocking agent ($p=0.995902$); incidence of postoperative nausea ($p=0.4$) and vomiting ($p=1.0$); length of post-anesthesia recovery ($p=0.995902$). But the cost of IA is about two folds higher ($p=0.000003$) and IA technique implies the reduction of total amount of used opioids ($p=0.011007$).

Limitations of the study: small sample size; no standardize study anesthesia protocol; observational study; anesthesiologists involved in study didn't attend any special training on providing volatile gas anesthesia, laparoscopic cholecystectomy is a relative short surgery, it is necessary a longer procedure in order to reveal benefits of one or another technique.

Conclusion: Partially, our result can be explained by a shortage of the anesthesiologists' experience in managing of the IA technique, this leads to waste of resources. Due to this we encourage to use IA for specific high ASA score patients and to create training opportunities for anesthesiologists in the field of VGA.

Key words: technique of anesthesia, TIVA, Inhalational Anaesthesia, assessment.

PREDICT POSTOPERATIVE BLEEDING AFTER CARDIOPULMONARY BYPASS IN CHILDREN

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Background: Systemic coagulation disorders after cardiac surgery requiring cardiopulmonary bypass (CPB) represent serious postoperative complications. The aim of the present study was to investigate the