

### #36424 POST-SPINAL ANESTHESIA SHIVERING (PSAS) IN ELDERLY – COMPARISON OF THE EFFECTIVENESS OF THE PROPHYLACTIC ADMINISTRATION OF CLONIDINE AND PROPOFOL ALONE OR IN COMBINATION

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**Please confirm that an ethics committee approval has been applied for or granted:** Not relevant (see information at the bottom of this page)

**Application for ESRA Abstract Prizes:** I don't wish to apply for the ESRA Prizes

**Background and Aims** Post-spinal shivering is a common side effect of spinal anesthesia, particularly in elderly patients. This prospective randomized double-blind controlled study has the purpose to explore the effectiveness and safety of low dose intravenous clonidine, propofol and clonidine plus propofol for prophylaxis of shivering in elderly undergoing lower abdominal surgery under spinal anesthesia

**Methods** 80 patients (ASA I-III, age > 65 years) scheduled for lower abdominal surgery under spinal anesthesia participated in the study. They were randomized to four groups, each of them with 20 patients, to receive 50µg clonidine (group C), 0,25 mg/kg propofol (group P), 50µg clonidine and 0,25 mg/kg propofol (group KP) and saline (group S). Drugs were administered after subarachnoid anesthesia with hyperbaric bupivacaine was performed. During surgery we recorded every 10' the incidence of shivering and its severity using Bedside Shivering Assessment Scale as primary endpoints. Secondary endpoints included the incidence of sedation and nausea/vomiting and the evaluation of hemodynamics during surgery. Student's t test was used for statistical interpretation considering  $p < 0,05$  as significant.

**Results** The incidence of shivering was significantly lower in groups CP ( $p < 0,001$ ), P ( $p < 0,05$ ), C ( $p < 0,005$ ) compared to placebo. Among the groups that received prophylactic medication, group CP showed an advantage documented by statistically relevant decrease of shivering incidence ( $p < 0,01$ ) compared to the other two groups. The incidence of sedation, the occurrence of nausea/vomiting and hemodynamic parameters registered similar values in all study groups.

**Conclusions** The combination of clonidine and propofol provide synergistic effects and is effective for controlling post-spinal anesthesia shivering in elderly.

### #36340 CARDIOVASCULAR TOXICITY: COMPARISON BETWEEN ROPIVACAINE AND BUPIVACAINE IN SPINAL ANESTHESIA

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**Background and Aims** Ropivacaine or 1-propyl-2', 6'-pipecoloxylidide, is a non-racemic chiral amino-amide similar to Bupivacaine in terms of structure. It differs from it by the substitution on its amine group of another group butyl replaced by a propyl group. It is considered as a pure S-levo-rotatory enantiomer of the molecule. Unlike Bupivacaine, which is a racemic equimolecular mixture of the two enantiomers. The objective of our study is to integrate and to generalize the use of Ropivacaine in spinal anesthesia.

**Methods** Descriptive prospective interventional comparative clinical study, for 120 adult patients were recruited and randomly divided into two groups (Ropivacaine group and Bupivacaine Group), 60 patients in each arm who were admitted to the operating room to undergo scheduled or urgent surgery requiring. The data collected are mainly the demographic and anthropometric characteristics. and perioperative hemodynamic parameters, namely: blood pressure (BP), heart rate (HR), incidence of acute toxicities cardiovascular. The data collected was analyzed by SPSS '20' software and Excel 2013 software.

**Results** 120 patients were included in our study, hemodynamic stability with the use of Ropivacaine, with low cardiovascular toxicity compared to the Bupivacaine group satisfaction in the Ropivacaine group.

**Conclusions** The anesthetic drug type Ropivacaine is promising for spinal anesthesia. The results found in our study are globally similar to those reported in the literature, which can conclude on the contribution of Ropivacaine compared to Bupivacaine in terms of efficacy and tolerance, with early ambulation. Finally, it can be used as a possible alternative to Bupivacaine in loco regional anesthesia.

### #36003 HYPOXEMIA AFTER PRILOCAINE ADMINISTRATION – A METHEMOGLOBINEMIA CASE REPORT

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**Background and Aims** With the SARS-CoV-2 pandemic, regional anesthesia techniques gained more impact because of the need to avoid airway manipulation. To assure a fast recovery and ambulation, prilocaine was used more frequently due to its fast onset and lower duration of action.

**Methods** We describe a case of methemoglobinemia in a patient submitted to a uterine aspiration after an abortion during the first trimester.

**Results** The patient weighted 50kg and had a medical history of ulcerative colitis medicated with sulfasalazine. She was anesthetized with spinal anesthesia with 60mg of hyperbaric prilocaine. After 17 minutes of the spinal technique the oxygen saturation dropped from 98-99% to 90% and a bluish discoloration on her lips was detected. With the assumption of a case of methemoglobinemia associated with prilocaine administration, methylene blue 1mg/kg was administered (50mg). The procedure was terminated, and she was admitted for surveillance. The case resolved with no complications.

**Conclusions** Methemoglobinemia is a rare complication associated with prilocaine. Normally higher doses are associated with the development of this syndrome. Sulfasalazine and other drugs administration may enhance the probability of the occurrence of methemoglobinemia. Methylene blue is an effective antidote for methemoglobinemia due to its own oxidizing properties.

### #36403 TRACHEAL STENOSIS AND BREAST SURGERY – AN ANAESTHETIC CHALLENGE

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**Background and Aims** Regional anaesthesia is frequently the preferred anaesthetic technique in cases of predicted difficult airway, as it avoids approaching the patient's airway. However, choosing the best technique frequently becomes a challenge for some surgeries.

**Methods** The authors describe the case of a 76-year-old patient undergoing a bilateral breast reduction surgery. She had a history of severe subglottic tracheal stenosis, which required multiple tracheal surgeries.

**Results** On the preoperative anaesthesia consultation the patient denied respiratory symptoms, no other predictors of difficult airway were identified and otorhinolaryngology observation did not contraindicate the surgery. Nevertheless, a 4.0mm internal diameter cuffed endotracheal tube was used in previous surgeries and a neck CT scan confirmed a 10x10mm subglottic tracheal stenosis; hence, an epidural anaesthesia with moderate sedation was the choice for the anaesthetic technique. On the day of surgery a thoracic catheter was placed at T5-T6 level and 0.4% ropivacaine and sufentanil were administered with a resulting sensory block from T1 to T8. A combination of ketamine and dexmedetomidine was used for sedation. The procedure was uneventful, with no respiratory adverse events.

**Conclusions** Thoracic epidural anaesthesia can avoid the need to manage the airway in cases similar to the one described. However it is not free of complications, including respiratory muscle paralysis with respiratory depression. Therefore, the level of surgical anaesthesia should be carefully tapered. Accompanied procedural sedation should also be regarded cautiously, as the need to maintain airway reflexes and spontaneous breathing is essential.

### #36246 ARISING FROM THE BOTTOM – A RARE COMPLICATION OF A THORACIC EPIDURAL CATHETER

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**Background and Aims** This case reports a rare thoracic epidural induced priapism and evidences the importance of prompt recognition and treatment to preserve erectile function.

**Methods** A 44-year-old, male, ASA II, underwent exploratory laparotomy and sigmoidectomy. Prior to general anesthesia induction, a thoracic epidural catheter was inserted at T10-T11. An initial bolus of 7 mL ropivacaine 0.2% was administered and sensory block was distributed from T6 level. No intercurrents were reported during the procedure and the patient was transferred to PACU with an epidural infusion of ropivacaine 0.15% at 5 mL/h. An erection was observed 13 hours postoperative. The epidural infusion was discontinued and Urology was consulted. Blood was aspirated from the corpora cavernosa to induce detumescence, which was unsuccessful. An injection of diluted epinephrine was then administered. No more erections were reported after discontinuation of the epidural infusion. The patient was referred to urology consultation and discharged.

**Results** In our case, we hypothesize that epidural was responsible for the low-flow priapism, considering the absence of direct trauma or hematological disease, uncorrelation of the surgical site with erectile physiology and priapism reversal following discontinuation of the epidural infusion. Priapism has been previously reported as a complication of epidural injection with opioids or in combination with local anaesthesia 1-3.

**Conclusions** This is a rare complication with unknown incidence and poorly understood pathophysiology. Notwithstanding, prompt identification is vital to prevent permanent damage. Otherwise, it may lead to emergency intervention as described here. Awareness must be raised regarding epidural-induced priapism to ensure early identification.

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### #35866 CONTINUOUS SPINAL ANESTHESIA IN HIGH-RISK PATIENT: A CASE REPORT

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**Background and Aims** Continuous spinal anesthesia (CSA) is particularly useful in lower limbs surgery in patients with cardiovascular and respiratory comorbidities.

**Methods** A 74-year-old male, BMI 27 Kg/m<sup>2</sup>, ASA IV status, was scheduled for urgent supragenicular amputation due to critical ischemia of the left lower limb. The patient had a history of type II diabetes mellitus, hypertension, heart failure (ejection fraction of 34%) NYHA III, atrial fibrillation, recent pulmonary embolism, and COPD. The patient was under anticoagulants, antiarrhythmics, anti-hypertensives, bronchodilators, and oral hypoglycemic agents. Laboratory analysis showed Hb 10.6 g/dL, no coagulation abnormalities (LMWH was stopped for 24 hours) and normal renal function. The patient was alert, eupneic without supplemental oxygen and hemodynamically stable. The patient was proposed for CSA with standard ASA and invasive blood pressure monitoring