

decubitus position for 15 minutes. In the GA group general anesthesia was inducted and maintained with target-controlled infusion propofol 1% combined with fentanyl 1.5 µg/kg. Intraoperative and recovery times, postanesthesia recovery scores, and postoperative outcomes were recorded. The continuous variables were analyzed according to the Student t test if parametric, or according to the Mann Whitney test if not parametric. Categorical variable were analyzed with χ^2 test or the Fisher's test. The level of significance was set as $p < 0.05$.

Times (min)	Spinal Group	General Group	p value
Surgery duration	45.5(35.0-50.0)	40.0(35.0 - 45.0)	0.091
Anesthesia duration	27.0(35.0-30.0)	30.0(25.0-30.0)	0.286
Time to ambulation	60.0(60.0-65.0)	60.0(60.0-75.0)	0.892
Time to urinary voiding	72.5(63.0-102.0)	80.0(65.0 - 135.0)	0.256
Time to discharge	132.5(120.0-150.0)	150.0(140.0-160.0)	0.010

[Intra-operative and recovery times]

Results and Discussion: The two groups were comparable with respect to patients characteristics and duration of surgery and anesthesia. Only one patient in SA group was converted to general anaesthesia due to inadequate level of sensory block. The times to achieve ambulation and to urinary voiding were similar between groups. The time for home readiness was shorter in SA group (132.5 min CI95% 120.0-150.0) versus GA group (150.0 min CI95% 140.0-160.0) ($p=0.010$).

The incidence of post-operative complications were rare in both groups.

Conclusion(s): Unilateral spinal anesthesia with low-dose hyperbaric 5% prilocaine provides recovery profiles and discharge times comparable to general anaesthesia with propofol. Patients receiving SA were able to go home earlier than GA patients without added complications.

2AP2-11

Perioperative negative pressure pulmonary edema: case scenario

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Background: The Negative Pressure Pulmonary Edema (NPPE) is a multifactorial condition, reported in patients after general anesthesia. Despite being uncommon (0.05-0.1%), it is a potentially life-threatening emergency that can be fatal in 11-40%. It characteristically occurs after endotracheal intubation, but has already been described after Laryngeal Mask Airway (LMA) use⁽¹⁾. As its occurrence is under-reported, our aim is to point out the importance of an expeditious diagnosis.

Case report: 24-yr-old woman (50Kg, 1,60m), presented to the ambulatory surgery center for an axillary ganglia excisional biopsy. Patient's medical his-

tory was relevant only for a recurrent spontaneous pneumothorax. Unknown allergies. Normal pre-operative study.

Inhalatory anesthesia, atraumatic LMA placed. Anesthesia and surgical procedure were uneventful. Transferred to Postanesthesia Care Unit (PACU), spontaneously ventilating (SV).

Ten minutes later, marked respiratory distress, tachypnea, cyanosis, accessory muscle utilization and significant arterial oxygen desaturation (40%) treated by positive-pressure mask ventilation until improved peripheral oxygen saturation. Physical examination revealed bilateral diffuse crackles and respiratory failure type I (PaO₂ 52mmHg). Chest radiograph with bilateral pulmonary infiltrates without pneumothorax signs.



[Image 1]

Transferred to Intermediate Care Unit, conscious, hemodynamically stable, SV with supplemental oxygen, SpO₂ >90%. An echocardiograph (normal) and an angio-computed tomography (acute pulmonary edema in resolution, no signs of thromboembolism) were performed. Progressive recovery without non-invasive pressure support, discharged from hospital on the 4th postoperative day. Follow-up in 8 weeks.

Discussion: When considering differential diagnosis of acute-onset perioperative pulmonary edema, NPPE was considered despite the absence of evident high airway obstruction. However, the clinical presentation and its rapid improvement are consistent with the diagnosis. Given the increasing use of LMA, similar episodes can become recurrent, being crucial its prompt recognition.

References:

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Learning points: We should be alert for the possibility of NPPE occurrence

Monitoring: Equipment and Computers

3AP1-1

The effect of hand dominance on neuromuscular monitoring at the adductor pollicis muscle

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Background and Goal of Study: Neuromuscular blockade of the adductor pollicis muscle may be influenced by hand dominance resulting in conflicting results of several studies. The primary purpose of this study was to determine if hand dominance influences measurements of neuromuscular blockade at the adductor pollicis using acceleromyography.

Materials and Methods: After induction of anesthesia, both ulnar nerves were stimulated supramaximally using a train-of-four (TOF) stimulation every 15 seconds in 31 patients. Acceleromyographic responses was monitored in both hands and 0.6 mg/kg of rocuronium was administered. Onset, maximum effect, and offset of rocuronium were measured and compared in both hands. Signals were recorded until TOF ratios were more than 0.9 in all patients.

Results and Discussion: In total, 27 patients were right-handed and 4 patients were left-handed. There were no differences in the mean supramaxi-

mal threshold or mean initial TOF ratio between dominant and nondominant hands. No statistically significant differences were found between 716 paired TOF ratios in the dominant or nondominant hand.

A correlation was seen between the dominant and nondominant hand [Nondominant = 0.931-Dominant + 1.714, R = 0.929]. Agreement from a Bland-Altman analysis was excellent with a bias of 1.6% and limits of agreement of -21.2% to 24.5% for all signals.

Conclusion(s): Dominant and nondominant hands can be used interchangeably for neuromuscular monitoring at the adductor pollicis muscle.

References:

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