



## EACTAIC-ICCVA Joint Congress

### POSTERS

PP:01

#### OPIOID-FREE ANESTHESIA IN CORONARY ARTERY BYPASS GRAFTING (CABG) SURGERY, DURING A DRUG SHORTAGES PERIOD IN THE COVID 19 PANDEMIC

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**Introduction:** Describe the effectiveness of opioid-free multimodal anesthetic/analgesic technique for CABG surgery during drug shortages period in COVID 19 pandemic.

VARIABLE	MEAN
Age (years)	62
Height (cms)	1,68
Weight (kg)	77,5
Male %	(2) 50%
Female %	(2) 50%
ASA Classification	III
Euroscore (%)	4,86
Miocardial revascularization	4 (100%)
12 Hours VAS	3
24 Hours VAS	7
48 hours VAS	4

**Methods:** Four patients with moderate and elevated EUROSCORE II, underwent to 2 and 3 vessel myocardial revascularization, three patients were undertaken Off-pump and the last one On-pump, using the same anesthetic/analgesic technique to assess pain control, opioid requirement in 48 hours, hemodynamical stability, time at the intensive care unit, delirium, postoperative nausea and vomiting (PONV).

Standard basic and invasive monitoring was used and a sedline monitor to measure hypnotic depth. In a sitted position a bilateral erector spinae block (ESPB) guided by ultrasound was placed at T6 and T7 level with a 17G Tuohy needle, through which 10 ml of 0.25% bupivacaine + 10 ml of 0.5% lidocaine without epinephrine was administered, with a catheter placement to continue analgesic management in postoperative period.

Anesthetic induction was performed with dexmedetomidine at 0.6 mcg/kg/h during preoxygenation for 5 minutes, lidocaine at 1 mg/kg, Propofol at 1 to 1.5 mg/kg, rocuronium between 0.6 and 1.2 mg/kg, dexamethasone 8 mg and the first paracetamol dose of 15 mg/kg was given. The maintenance was target with sedline monitor using PSI and performed with sevoflurane between 0.7 and 0.8 CAM, dexmedetomidine between 0.4 and 0.6 mcg/kg/h, ketamine 0.2 mg/kg/h and within the skin closure the infusion through erector spinae catheters was started between 5-8 ml/h of bilateral 0.125% bupivacaine, continued with paracetamol 15 mg/kg every 8 hours. The protocol considered using opioids as a rescue therapy with hydromorphone or morphine according to pain, quantifying the requirement in the first 48 hours.

**Results:** Pain assessment through Visual Analogue Scale (VAS) showed peak value at 24 hours (VAS mean value of 7), with lower levels at first 12 and 48 hours (mean values of 3 and 4 respectively). Correspondingly, opioid use was increased in the first 24 hours, a mean of 6,9 mg between morphine equivalent doses, with a posterior drop (a mean value of 1,6 mg) in all patients but one. All patients required vasopressor and inotropic in two cases, however with low doses and adequate progressive withdrawal. No patient presented PONV or delirium in the first 48 hours.

**Discussion:** Opioid-free anesthesia is a feasible strategy in patients undergoing CABG surgery, it gives an adequate depth anesthetic parameters keeping adequate hemodynamic stability, with an optimal control of both endocrine and metabolic changes and having acceptable time of stay in the intensive care unit with no increase in morbidity and mortality outcomes. We believe this experience gives the support to continue affording care of urgency cardiac surgery and could be extrapolated to non-cardiac surgery.

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