

# TOTAL HIP ARTHROPLASTY AND INTERNAL FIXATION OF PROXIMAL HUMERUS FRACTURE IN A HIGH RISK PATIENT

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Argomento: Anestesia loco-regionale e analgesia

**Introduction.** Elderly patients with multiple comorbidities are at higher risk of developing complications related to general anesthesia. We describe the anesthetic and airway management in a multi-comorbid patient with homolateral upper and lower limb fracture.

**Case Report.** A 78-year-old man was admitted for surgical treatment of homolateral hip and humerus fractures. His medical history was: COPD, sleep apnea, , diabetes mellitus, chronic renal failure, dilated cardiomyopathy and left ventricular systolic dysfunction. Additionally the patient referred history of unsuccessful endotracheal intubation in a previous surgery. After minimal sedation with midazolam and airway premedication with Lidocaine 1% spray according to our internal protocol, awake nasal fiberoptic intubation was performed. Regional anesthesia plan was combined ultrasound-guided interscalene and infraclavicular brachial plexus blocks with 20 ml mepivacaine 1,5% and 10 ml levobupivacaine 0,25%. Subsequently lumbar plexus, sciatic and lateral femoral cutaneous nerve blocks were performed with a total of 42 ml levobupivacaine 0,25%. Low dose dexmedetomidine infusion and O<sub>2</sub> was given intraoperatively. Patient was awake and cooperative during surgery. Nasoendotracheal tube was well tolerated. There were no complications in intraoperative and postoperative periods.

**Conclusion.** The hemidiaphragm paralysis due to interscalene brachial plexus block and the lateral decubitus to the opposite site during THA reduce thoracic compliance. These conditions could contribute to acute respiratory dysfunction. In addition the patient had a history of failed endotracheal intubation, and an awake fiberoptic intubation was planned and used successfully for an airway management. Moreover, general anaesthesia carries high risks of postoperative complications with increased morbidity and mortality in high risk patients. Peripheral nerve block was a safe option for this patients for the maintenance of spontaneous breathing with minimal sedation and minimal hemodynamic changes.