



# UDRUŽENJE MEDICINA DANAS

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**Serbian Society of Intensive Care Medicine**

**IV CONGRESS OF INTENSIVE CARE MEDICINE**

*(29th-31st March 2019, Master Centre, Novi Sad)*

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## **Serbian Society of Intensive Care Medicine**

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**REMIFENTANIL IN THE POSTOPERATIVE PAIN TREATMENT AFTER NUSS PROCEDURES**

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Nuss procedure is a minimal invasive surgical technique based on retrosternal placement of a metal plate to correct pectus excavatum chest deformity. Perioperative anesthetic and pain management of patients undergoing the Nuss procedure is a challenge to the anesthesiologist. A general anesthesia supplemented with good analgesic technique is crucial to the success of the surgery and reducing perioperative complications. Although there are cardiorespiratory abnormalities associated with pectus excavatus, these rarely impact anesthetic management or increase risk. A number of techniques of regional anesthesia and systemic analgesics are described and applied in the treatment of postoperative pain. Any kind of pain therapy has its advantages and disadvantages. Remifentanyl due to their good analgesic properties and relative ease of titration of continuous infusion proved to be a good choice in postoperative pain treatment in these patients. Patients may require long-term pain management after discharge and anesthesiologists may be asked to help surgeons with the outpatient pain management of patients after Nuss procedure.

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**DILEMMAS IN MECHANICAL VENTILATION IN PEDIATRIC POPULATION**Marina Pandurov<sup>1,2</sup>, Goran Rakić<sup>1,2</sup><sup>1</sup>Faculty of Medicine, University of Novi Sad, Novi Sad, Serbia<sup>2</sup>Institute for Health Protection of Children and Youth, Novi Sad, Serbia

Despite the known pediatric phrase that "the child is not only small man", a lot of practice is based mainly on expert opinion and extrapolation of data examined on the adult population, and is still being applied today. This is an obvious unwanted situation for the practice we face in our day-to-day work, working in pediatric intensive units. Unique differences in lung development, immature respiratory system as well immune response and surfactant homeostasis prevent the data obtained from the adult population being directly applied to children. Also, there are many disagreements and misunderstandings regarding the application of mechanical ventilation in children. One of them is the

type of lung protective strategies that is most effective, or usage of prone positioning and neuromuscular blockers in children. There are no or very limited guidance regarding PEEP titration, recruitment maneuvers or weaning from mechanical ventilation. Moreover, for the many newer applied concepts, long-term neurodevelopmental outcome remains extensively unknown. Although, mechanical ventilation is life saving procedure, it can cause lung injury, leading to potentially fatal outcome. Therefore, in the pediatric critical care environment there is the need for better data quality and less unknown, untested and unproven concepts.

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