broncho-obstructive syndrome, children, inhalation therapy, intensive care, respiratory failure, hypoxia

### Abstract:

Broncho-obstructive syndrome (BOS) is a common clinical manifestation in pediatric patients characterized by bronchial inflammation, swelling, and excessive mucus production, often leading to acute respiratory failure and hypoxia. This study evaluates the effectiveness of inhalation therapy in the intensive treatment of BOS. A total of 52 children aged 0.2 to 4 years hospitalized during the winter season of 2024 were included. They were divided into two groups: the first (n=28) received standard treatment, while the second (n=24) additionally received inhalation therapy using Pulmicort (0.25 mg) and 0.9% sodium chloride via the "Ulaizer HOME" nebulizer. Clinical monitoring showed that the group receiving inhalation therapy had faster improvement in respiratory parameters, reduced hospital stay, and earlier resolution of symptoms such as shortness of breath, restlessness, and digestive discomfort. Oxygen saturation increased to 94–96%, and BOS symptoms improved by an average of  $2.7\pm0.6$  days compared to  $3.7\pm1.4$  days in the control group. These findings support the use of inhalation therapy as an effective adjunct to conventional treatment in pediatric intensive care settings for BOS.

# YUZ-JAGʻ JARROHLIK AMALIYOTIDA NAFAS YOʻLLARI OʻTKAZUVCHANLIGINI TA'MINLASH CHORA-TADBIRLARI

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Kalit soʻzlar: nafas yoʻllari, qiyin intubatsiya, retrograd intubatsiya, yuzjagʻ jarrohligi, bolalar, anesteziya, traxeostomiya

**Dolzarbligi** Bolalar jarrohlik amaliyotida nafas yoʻllari oʻtkazuvchanligini ta'minlash muhim klinik jihatlardan biridir. Yuz-jagʻ sohasi bilan bogʻliq operatsiyalarda traxeal intubatsiya muammoli boʻlishi mumkin va qiyin intubatsiya holati 4–18% holatlarda kuzatiladi. Bunday vaziyatlarda an'anaviy usullarga muqobil sifatida retrograd intubatsiya usuli tavsiya etiladi.

**Maqsad** Yuz-jagʻ jarrohlik amaliyotida nafas yoʻllari oʻtkazuvchanligini ta'minлашda retrograd intubatsiyaning samaradorligini baholash.

**Material va usullar** Samarqand viloyat koʻp tarmoqli bolalar tibbiy markazi yuzjagʻ jarrohlik boʻlimida 2019–2024 yillar davomida jagʻ ankilozi tashxisi bilan 16 nafar bola (9 nafar oʻgʻil, 7 nafar qiz, oʻrtacha yosh: 6,2±0,8) operatsiya qilindi. Bemorlarning qiyin intubatsiya darajasi Mallampati testi boʻyicha 4-darajada, ASA xavf darajasi 3-darajada baholandi. Barcha bemorlarga retrograd intubatsiya usuli qoʻllandi. Ushbu texnikada Tuohy ignasi yordamida traxeaga epidural kateter oʻtkazilib, ogʻiz boʻshligʻi orqali intubatsion naycha traxeaga kiritildi. Muolajalar davomida hemodinamik koʻrsatkichlar "UM-300 Patient Monitor" orqali nazorat qilindi.

Natijalar Intubatsiya muolajasidan oldin puls 140±3,2, SpO<sub>2</sub> 91–96%, sistolik bosim 120±4,1 mm.sm.ust., diastolik bosim 85±3,8 мм.sm.ust. бўлса, интубациядан сўнг ушбу кўрсаткичлар барқарорлашди: puls 88±2,2, SpO<sub>2</sub> 92–96%, sAQB 114±3,2, dAQB 83±1,6. Texnik jihatdan muammo kuzatilmadi. Traxeostomiya kerak boʻlish ehtimoli mavjud boʻlsa-da, retrograd usul muvaffaqiyatli qoʻllanildi ва muqobil usulga ehtiyoj qolmadi.

**Xulosa** Yuz-jagʻ sohasida "qiyin intubatsiya" hollari koʻp uchraydi. Ushbu bemorlarda retrograd intubatsiya usuli xavfsiz, samarali va asoratlarsiz alternativ usul sifatida oʻzini oqlaydi. Operatsiya oldidan toʻgʻri baholash va anesteziologik tayyorgarlik usulning muvaffaqiyatini belgilaydi.

# Measures to Ensure Airway Patency in Maxillofacial Surgery in Children Authors:

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#### **Keywords:**

airway management, difficult intubation, retrograde intubation, pediatric surgery, maxillofacial surgery, anesthesia, tracheostomy

Abstract: Ensuring airway patency is a critical factor in pediatric surgery. In maxillofacial procedures, standard tracheal intubation may be complicated due to anatomical limitations, resulting in difficult intubation in 4–18% of cases. In such scenarios, retrograde intubation is recommended as an effective alternative. This study involved 16 pediatric patients (mean age 6.2±0.8 years) diagnosed with jaw ankylosis who underwent surgery at the Regional Children's Medical Center in Samarkand between 2019–2024. All patients underwent retrograde intubation using a Tuohy needle and an epidural catheter inserted through the cricothyroid membrane and guided out through the oral cavity, over which the endotracheal tube was inserted into the trachea. Hemodynamic indicators were monitored via the "UM-300 Patient Monitor." The procedure showed no technical difficulties. Pre-intubation vitals included pulse 140±3.2, SpO<sub>2</sub> 91–96%, systolic BP 120±4.1 mmHg, and diastolic BP 85±3.8 mmHg. After intubation, parameters stabilized. The technique avoided the need for tracheostomy and ensured safe anesthesia induction. Retrograde intubation is a reliable method in difficult airway cases during pediatric maxillofacial surgery.