

74. TRACHEOSTOMY IN THE ICU

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Introduction. A tracheostomy is a procedure that permits creating a temporary or definitive channel in the anterior wall of the trachea to help breath or to ensure efficient artificial ventilation.

Aim of study. Tracheostomy is the most frequently performed procedure to patients admitted to the ICU that requires long mechanical ventilation. The most important indication for tracheostomy is the need for prolonged mechanical ventilation due to difficult airway management like upper airway obstruction in trauma, burn, surgery or cancer. A greater proportion of ICU patients undergo elective tracheostomy after considering the adverse sides of a prolonged translaryngeal intubation. The procedure reduced injuries and better tolerance, lower laryngeal complications. In a recent published nationwide survey investigating the indication, timing and preferred technique of tracheostomy. As said, prolonged mechanical ventilation was the leading indication for tracheostomy, followed by provision of airway protection, in neurological, traumatic or surgical disorders.

Methods and materials. The study was performed on a group of 61 patients with tracheostomy performed in the ICU. The study was based on the examination of the files of patients who were hospitalized from 01.01.2021 to 19.02.2022 in the Institute of Emergency Medicine of Republic of Moldova, Anesthesiology and Intensive Care Unit Department.

Results. The study group was studied by department, Group I the Neurosurgical department-47%, Group II Trauma department-13%, Group III Surgery department-27%, Group IV Other than those listed-11%. From Group I the Neurosurgical patients, 37% were discharged and 63% died, Group II Trauma department-38% were discharged and 62% died, Group III Surgery department- 35% were discharged and 65% died, Group IV Other than those listed-57% were discharged and 43% died. We divided the patients after the period of the tracheostomy was performed: Group A 1-5th day- 41% (discharged 48%, deceased 52%), Group B 6-10th day- 43% (discharged 42%, deceased 58%), Group C 11-20th day- 5% (discharged 33%, deceased 67%), Group D more than 20 day- 11% (discharged 15%, deceased 85%).

Conclusion. Conclusions Tracheostomy is applied to all patients admitted to the intensive care unit in critical condition. We observe the predominance of neurosurgical patients, whose survival rate is much lower compared to the mortality rate-63%. We also observe that, faster the tracheostomy is performed, the survival rate is higher from 48% in the first 5 days and decreases to 42%, 33% and 15% after 20 days.