TITLE PAGE

|  |  |  |  |
| --- | --- | --- | --- |
| **ARTICLE TITLE** | | **ANALYSIS OF THE ETIOLOGICAL STRUCTURE OF NOSOCOMIAL PNEUMONIA ASSOCIATED WITH ARTIFICIAL LUNG VENTILATION** | |
| **Authors** | | Lokotkova A.I. ¹, Shlyapchenkova T. Yu.², Lopushov D.V. ³ | |
| **Institute** | | 1Sechenov University, Russian Federation  2Kemerovo State Medical University, Russian Federation  3University clinic of Kazan Federal University | |
| **Key words** | | **Key words:** etiological structure, antibiotic resistance, nosocomial pneumonia associated with artificial lung ventilation, prevention. | |
| **E-mail for correspondence** | | Allalok222@mail.ru | |
| METADATA | **Alla I**. **Lokotkova** – DM, Prof., SBEI APE «Kazan State Medical Academy» of Health Ministry of the Russian Federation  +791723916675, [allalok222@mail.ru](mailto:allalok222@mail.ru)  ORCID 0000-0003-4482-6050  **Tat'yana Yu. Shlyapchenkova** – DM, Prof., Head of Epidemiological lssues University clinic of Kazan Federal University 89375225788, tatyana21115@bk.ru https:// orcid.org/ 0000-0003-4010-9919  **Dmitriy V. Lopushov** - DM, Prof., Associate Professor of the Department of Epidemiology and Desinfectology of the SBEI APE “Kazan State Medical Academy” of Health Ministry of the Russian Federation, Associate Professor of the Department of Federal State Budgetary Educational Institution of Higher Educationan «Kazan Medical University» of the Ministry of Healthcare of the Russian Federation+7(843) 293-34-83, doctor112225@mail.ru https:// orcid.org/ 0000-0001-8896-969Х | |
| **Abstract** (**Relevance, Aims, Materials and Methods, Results, Conclusions)**  For review: **Relevance, Aims, Conclusions.** | Nosocomial pneumonia is one of the most frequently reported infectious complications with patients of intensive care units. They constitute up to 44% of all infections in the intensive care units. The risk of their development increases with the artificial lung ventilation.  **Objective:** to analyze the etiological structure with an assessment of the spectrum of antibiotic resistance of pathogens extracted from patients with signs of infections of the respiratory tract patients on artificial lung ventilation in the intensive care unit of the neurological department.  **Materials and methods** - the study included the records of 98 patients with acute cerebrovascular accident being on artificial lung ventilation in the resuscitation ward of the Neurological Department in 2015 - 2017.  **Results**: During the analyzed period, based on the epidemiological analysis, an adverse epidemic situation on respiratory tract infections was established among patients on artificial lung ventilation in the intensive care unit of the neurological department of a multidisciplinary hospital. According to the results of microbiological studies, gram-negative bacteria dominated in the clinical material of these patients. In parallel, a study on strains susceptibility to antibiotics was conducted. A high proportion of polyresistance was more often observed among A. baumani.  **Conclusion**: Microbiological monitoring of the colonization of the respiratory tract will allow targeted prevention and treatment of lower respiratory infections. To improve disinfection measures for artificial lung ventilation apparatus. | |
| **References** | 1. Spalding MC, Cripps MW, Minshal CT. Ventilator-Associated Pneumonia: New Definitions. *Crit. Care Clin.* 2017; 33 (2): 277-92.  2. Craven DE, Kunches LM., Kilinsky V, et al. Risk factors for pneumonia and fatality in patients receiving continuous mechanical ventilation. *Am. Rev. Respir. Dis.* 1986; 133 (5): 792-6.  5. Holzapfel L, Chevret S, Madinier G, et al. Influence of long-term oro- or nasotracheal intubation on nosocomial maxillary sinusitis and pneumonia: results of a prospective, randomized, clinical trial. *Crit. Care Med*. 1993; 21: 1132-8. | |