

**PREDOMINANCE OF MICROORGANISMS
WHICH WERE ISOLATED FROM RESPIRATORY TRACT
IN CHILDREN WITH RESPIRATORY DISEASES**

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Respiratory tract infections are one of the main causes of children's morbidity. Pneumonia is the leading cause of children's mortality in developing countries. Among other microorganisms *Streptococcus pneumoniae*, *Haemophilus influenzae*, *Staphylococcus aureus* are considered to be the most important pathogens that cause pneumonia. The aim of this study was to reveal prevalence of microorganisms isolated from respiratory tract in children suffered from respiratory diseases. The present study involved children aged 1 year to 18 years with respiratory diseases: pneumonia, bronchitis, bronchial asthma. Nasal swabs, pharyngeal swabs and sputum samples obtained within 24 hours of admission were examined using general methods of isolation and identification of microorganisms. A total number of 372 strains of microorganisms were isolated. Gram-positive microorganisms were isolated 291 strains (78,23% from the general amount of all microorganisms), Gram-negative microorganisms were isolated 81 strains (21,77%). *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Streptococcus pneumoniae*, were among Gram-positive microorganisms. *Pseudomonas aeruginosa*, *Nonfermenting gram-negative bacilli*, *Klebsiella pneumoniae*, *Haemophilus spp* were among Gram-negative microorganisms. Gram-positive microorganisms were isolated more frequently compared with Gram-negative microorganisms ($p < 0,05$). From pharynx there were isolated 213 strains of microorganisms (57,26 % from the general amount of all microorganisms), among them Gram-positive 158 strains (74,18 % from the amount of all microorganisms, isolated from pharynx), Gram-negative 55 strains (25,82 %). From nose there were isolated 95 strains of microorganisms (25,54% from the general amount of all microorganisms), among them Gram-positive 86 strains (90,53% from the amount of all microorganisms, isolated from nose), Gram-negative 9 strains (9,47%). From sputum there were isolated 64 strains of microorganisms (17,20% from the general amount of all microorganisms), among them Gram-positive 47 strains (73,44 % from the amount of all microorganisms, isolated from sputum), Gram-negative 17 strains (26,56 %). This study showed that Gram-positive microorganisms were most often isolated from patients with respiratory tract infections.