

## 29. MICROBIOLOGY AND THE ROLE OF STREPTOCOCCI IN DEVELOPING BACTERIAL ENDOCARDITIS

Author: Butcaru Nicole

**Scientific adviser:** Carolina Lozan-Tirsu, MD, Associate Professor, Department of Mycrobiology and Imunology, *Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova.

**Introduction:** Streptococcal infection is currently a major cause of morbidity and mortality amongst the world. This calls for a comprehensive study of the underlying factors predisposing to streptococcal infection as well as early diagnosis, as studies show that most cases of bacterial endocarditis are diagnosed after the onset of infection.

**Background**: In this study our aim was to explore the matter of Description of the microorganism-host interaction process with emphasis on the main compounds involved in its occurrence. This study provides knowledge of the distribution of various groups and species of streptococci that cause infectious endocarditis (IE). With better classification of streptococci causing IE, future studies could examine differences in complications and outcomes associated with different streptococci.

**Methods and materials.** The present work studied 46 materials and literature sources from the Medscape, PubMed, Scopus, and Google Scholar databases in terms of clinical manifestations, symptoms and syndromes of the role of streptococci in developing bacterial endocarditis (2010-2022). Most of the used literature sources refer to the last years of publication (2016-2022).

**Results.** According to obtained outcomes the ethiological distribution of streptococcus endocarditis are following: viridans group streptococci accounted for 76% of all streptococcal IE, pyogenic streptococci were the causative pathogens in 17% of streptococcal IE, other streptococci were the causative pathogen in 6% of streptococcal IE.

**Conclusion.** According to this study there was determined that streptococci especially those from the viridans group are the most common in the infectious endocarditis.