Clinical and epidemiological profile of patients treated at University Hospital Centre Rijeka with a diagnosis of infective endocarditis in a 5-year period

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Background: Infective endocarditis (IE) is an infection of heart valves endocardium or an endocardial surface elsewhere, caused by microorganisms. The aim of our research was to present the clinical and epidemiological profile of patients with a diagnosis of the IE, hospitalized and treated at the University Hospital Centre Rijeka in the period from January 2012 to January 2017.

Methods: We performed a retrospective study and 74 patients with the diagnosis of IE were identified in a five year period. Duke criteria were used for diagnosis. The study was based on data from the Department for Cardiovascular Diseases, Internal Medicine Clinic, University Hospital Centre Rijeka. All patients signed informed consent.

Results: Out of a total of 74 identified patients, 29 were women (39.19%) and 45 men (60.81%). The average age of patients was 72 (32-88) years, while the average duration of hospitalization was 25 days. At admission, high fever was present in 52.70% of cases. Hemoculture was positive in 83.56% of cases. *S. aureus* (24.59%) and *E. faecalis* (24.59%) were most frequently isolated pathogens in blood cultures. 93.24% of patients had echocardiographic visible vegetation. Most common, the infection was located on aortic (40.54%) and mitral valve (40.54%). The tricuspid valve was affected by 4.05% (n = 3) cases, while simultaneous involvement of the aortic and mitral valve was present in 8.11% (n = 6) cases. The most commonly reported was mitral regurgitation 74.32% (n = 55), then tricuspid 70.27% (n = 52) and aortic regurgitation 55.41% (n = 41). In 28.38% of patients prosthetic heart valve was infected. The most common comorbidities were: arterial hypertension (64.86%), anemia (51.35%), and diabetes mellitus (36.49%). Hospital mortality rate was 12.16%.

Conclusion: According to our research, patients were predominantly older (72 years), with numerous comorbidities. IE is a serious illness with high mortality. Given the large number of afebrile patients, IE should be considered even in those who do not show signs of infection, so we could diagnose it earlier, with the earliest start of proper treatment of this disease.

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