



УНИВЕРЗИТЕТ У НОВОМ САДУ
UNIVERSITY OF NOVI SAD

TOP ACHIEVEMENTS 2022

FACULTY OF MEDICINE

Published work in the journal category M21a, 3/143, IF 35.855 (title: Outcomes of culture-negative vs. culture-positive infective endocarditis: the ESC-EORP EURO-ENDO registries)

EUROPEAN HEART JOURNAL 2022;43(29):2770-80

Prof. Dr. Ilija Srdanović, associate professor

Mortality from infective endocarditis (IE) is high worldwide, and diagnosis remains a challenge. Objective: The aim of this study was to compare the clinical characteristics and outcomes of patients with blood culture positive (CPIE) versus blood culture negative IE (CNIE). This was an ancillary analysis of the ESC-EORP EURO-ENDO registry. Methodology and Results: 3113 patients diagnosed with IE during the study period were included in this study. Of these, 2590 (83.2%) had CPIE, while 523 (16.8%) had CNIE. A large number of 1488 (48.1%) patients underwent cardiac surgery during the index hospitalization, 1259 (48.8%) with CPIE and 229 (44.5%) with CNIE. CNIE was a predictor of 1-year mortality [(HR) 1.28, 95% confidence interval (CI) 1.04–1.56], while operative treatment was significantly associated with survival (HR 0.49, 95% CI 0.41–0.58). One-year mortality was significantly higher in CNIE versus CPIE patients in the medically treated subgroup, but was not significantly different in CNIE versus CPIE patients undergoing operative treatment. Conclusion: The present analysis of the EURO-ENDO registry confirms a higher long-term mortality in patients with CNIE, compared to patients with CPIE. This difference was present in patients who received only medical therapy and not in those who underwent operative treatment, while operative treatment was associated with reduced mortality. Additional efforts are needed to improve the etiological diagnosis of IE and to identify cases of CNIE earlier, before progressive disease potentially contraindicates surgery. The research team of the Institute for Cardiovascular Diseases of Vojvodina, also teachers and associates of the Faculty of Medicine in Novi Sad consisted of: Ilija Srdanović, Maja Stefanović, Stamenko Šusak, Lazar Velicki, Aleksandra Vulin, Mila Kovačević, Aleksandar Redžek. With the help of Dr. Dragana Dabović and Dr. Teodora Pantić, prospectively collected data on respondents in the period January 1, 2016-March 31, 2018. Our center was among 156 others from 40 countries worldwide that participated in the ESC-EORP Euro-ENDO registry, recruiting 42 (1.4%) patients, by far the largest number in the region. From the ESC-EORP Euro-ENDO registry, another paper was published in 2022 from the M22 category: Pazdernik, M., Iung, B., Mutlu, B., Alla F., Riezebos R., Kong W., Pereire Nune



MC ., Pierard L., Srdanovic I., Yamada H., De Martino A., Haertel Maglioranza., Magne J., Piper C., Laroche C., Megnioni AP., Lancellotti P., Habib G., Selton-Suty C.. Surgery and outcome of infective endocarditis in octogenarians: prospective data from the ESC EORP EURO-ENDO registry. *Infection* 50, 1191–1202 (2022). <https://doi.org/10.1007/s15010-022-01792-0>. The third paper from the ESC-EORP Euro-ENDO registry, entitled Pulmonary valve endocarditis during and beyond Euro ENDO registry: a single center overview with a case series, is in the process of peer review and we expect its publication soon.