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P41..Early surgery for infective endocarditis: results for a multi-centre nationwide epidemiological study

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Objective: Early cardiac surgery for IE is a challenging issue. Data on optimal timing of surgical treatment for IE are controversial.

Methods: We conducted a nationwide multi-centre prospective study on IE during the era of economic crisis (2011-2014). Definite cases of native valve endocarditis (NVE), prosthetic valve endocarditis (PVE) and cardiac electronic implantable device (CEID) IE were analysed through survival regression models. Surgery for IE was evaluated in the subset of patients with a clear surgical indication.

Results: Among 224 IE patients, we evaluated a subset of 121 patients with clear indication of cardiac surgery for IE according to recent ESC guidelines. Patients (mean age \pm SD= 62.25 \pm 16.07) were male (n=86, 71%), with comorbidities (n=87, 72%). Cases were also identified as left-sided IE (n=103, 85.1%), PVE (n=28, 23.1%) CEID (n=7, 5.8%) and Health-care associated IE (n=29, 24%). Staphylococcus aureus predominated (n=28) followed by Enterococci (n=20), Viridans group Streptococci (n=20) and Candida spp (n=8). Age more than 60 years old [OR 0.382, CI95%:0.164-0.890; p=0.026], duration of symptoms of IE less than one month [OR 0.290, CI95% 0.125-0.673; p=0.004] and lack of compliance with antimicrobial treatment guidelines [OR 0.325, CI95%:0.116-0.912; p=0.033], were associated with less surgery despite indication. Early surgery, (within a mean time \pm -SD of 15.8 \pm 11.2 days from indication to operation) was performed in 43.5% of patients bearing a strong, independent from other factors, protective effect against in-hospital mortality (HR 0.271, CI95% 0.116-0.634; p=0.003); if operation was performed within 7 days from indication, 100% of patients had survived.

Conclusions: Upon indication, early surgery was strongly beneficial and independently associated with decreased 60-day mortality.