The 3 noes right-sided infective endocarditis: a unrecognized type of right-sided endocarditis

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Introduction: The "3 noes right-sided infective endocarditis" (3no-RSIE: no left-sided, no drug users, no cardiac devices) was depicted for the first time more than a decade ago. We describe the largest series to date to characterize its clinical, microbiological, echocardiographic and prognostic profile.

Methods: Eight tertiary centers with surgical facilities participated in this study. Patients with right-sided endocarditis without left involvement, absence of antecedents of drug use and no intracardiac electronic devices were retrospectively included in a multipurpose database. A total of 53 variables were analysed in every patient. We performed a univariate analysis of in-hospital mortality to determine variables associated with worse prognosis.

Results: A total of 100 patients (mean age 54.1±20 years, 65% male) with definite 3no-RSIE were included (16.7% of all the right-sided endocarditis of the series). Most of the episodes were community-acquired (72%), congenital cardiopathies were frequent, fever was the main manifestation at admission (85%). The microbiological profile is led by Staphylococci spp. Vegetations were detected in 92% of the patients. Global in-hospital mortality was 19% (5.7% in patients operated and 26% in patients who received only medical treatment, $p<0.001$). Non community-acquired infection, diabetes mellitus, right heart failure, septic shock and acute renal failure were more common in patients who died.

Conclusions: The clinical profile of 3no-RSIE is closer to other types of RSIE than to LSIE, but mortality is higher than that reported on for other types of RSIE. Surgery plays an important role in improving outcome.