Abstract: P1559

Lead related infective endocarditis- Types of pathogens and their importance

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Topic(s):
Device Complications and Lead Extraction

Citation:

Background

Lead related infective endocarditis (LRIE) is the most dangerous infection associated with cardiac implantable electronic devices and the cause of poor prognosis

Purpose

Assessment of types of pathogens and long-term survival of patients undergoing transvenous leads extraction (TLE) due to LRIE.

Methods

We did a retrospective analysis of data from 3810 patients undergoing TLE (772 with LRIE) in two high-volume centers in years 2006-2017. We evaluated the clinical and procedural factors and long-term prognosis depending on the type of identified microorganism.

Results

Comparative analysis showed Staphylococcus aureus dominating in male patients, with older age during implantations (with younger leads) and in patients with chronic kidney disease. Staphylococcus epidermidis and other Staphylococci were more commonly in patients with older leads and more preceding procedures. The worst long-term prognosis was found in infections caused by other Staphylococci, the best survival in the case of Staphylococcus epidermidis MSSA.

Conclusions

The study showed a relationship between clinical and procedural factors and the type of isolated microorganism. The adverse effect of LRIE on long-term prognosis after TLE was also confirmed with an average 50% survival after 5 years. These observations should promote better prevention of infectious complications.
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