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Abstract (poster session)

High success rates of daptomycin treatment in intra-cardiac foreign body infections: six-year analysis from EU-CORESM

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Objectives: Although implantation of intra-cardiac devices or prosthetic valves can be life-saving, infections associated with implanted materials are often serious. While daptomycin effectiveness in preclinical in vivo models for biofilm-associated infections is well characterized, few data are currently available on its clinical use in intra-cardiac foreign body infections. Here, we report real-world treatment outcomes in patients with intra-cardiac foreign body infections from the European Cubicin[®] Outcomes Registry and Experience (EU-CORESM). **Methods:** Data from EU-CORESM, a retrospective, non-interventional, multicentre registry, were collated for patients, who received daptomycin between January 2006 and April 2012. Investigators assessed clinical outcomes as success (cured plus improved), failure or non-evaluable. Safety was assessed up to 30 days after completion of daptomycin therapy. **Results:** Of 5551 patients enrolled, 166 had intra-cardiac foreign body infections (70% male; 54% aged ≥ 65 years). Most patients (96%) had a significant underlying disease, including cardiovascular (92%) and renal (20%) diseases. For patients (92%) with culture results, the most frequent pathogens were *Staphylococcus aureus* (29%; of which 44% were methicillin-resistant) and coagulase-negative staphylococci (CoNS, 29%). During daptomycin therapy, 65% of patients underwent surgery. Daptomycin was commonly used as second-line therapy (82%), with most patients (74%) receiving concomitant antibiotics (most frequently penicillins and aminoglycosides). The most common dosing regimen of daptomycin was 6 mg/kg (45%), but 39% of patients received higher doses. The median duration of therapy was 21 days (range 1–91). Clinical success was achieved in 78% of patients overall, and in 82% and 77% of patients with infections caused by *S. aureus* and CoNS, respectively. The success rates of daptomycin as first-line or second-line therapy were similar (81% and 78%, respectively). Daptomycin was generally well tolerated. Adverse events (AEs) and serious AEs possibly related to daptomycin were reported in 4% (including 3 cases with CPK elevation) and 1% of patients, respectively. **Conclusion:** These findings show that daptomycin had a favourable safety and tolerability profile and was highly efficacious as first-line and second-line therapy for the treatment of serious infections associated with intra-cardiac foreign bodies. These promising outcomes may warrant further investigation.