PHILIPS

Image Guided Therapy

Heart Rhythm Management

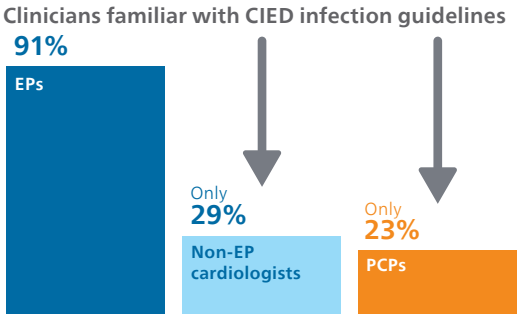
New data

Only 50% of cardiologists recommend guideline-driven care for CIED infections[1]

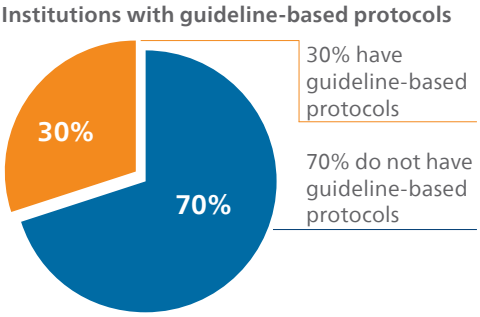
A recent survey performed by the the American College of Cardiology (ACC) sought to understand the familiarity of guidelines as well as the management of cardiac implantable electronic device (CIED) infection patients with key non-extracting physician groups.[1] The data was presented at the American Heart Association (AHA) and found significant knowledge gaps in treating CIED infections according to guidelines.

Results

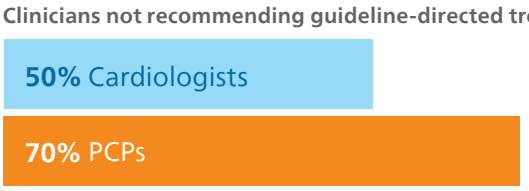
1. Of 387 physicians surveyed, only 29% of non-EP cardiologists and 23% of PCPs were familiar with the current published guidelines recommending complete system removal when CIED infection present. Yet 91% of EPs were familiar with the guidelines regarding CIED infection.



2. Only 30% of cardiologists specified their institution had guideline-based protocols in place for managing patients with CIED infection.



3. Nearly 50% of cardiologists and 70% of PCPs did not recommend guideline-directed treatment to patients (complete system removal) when presented with pocket infection.



Conclusion

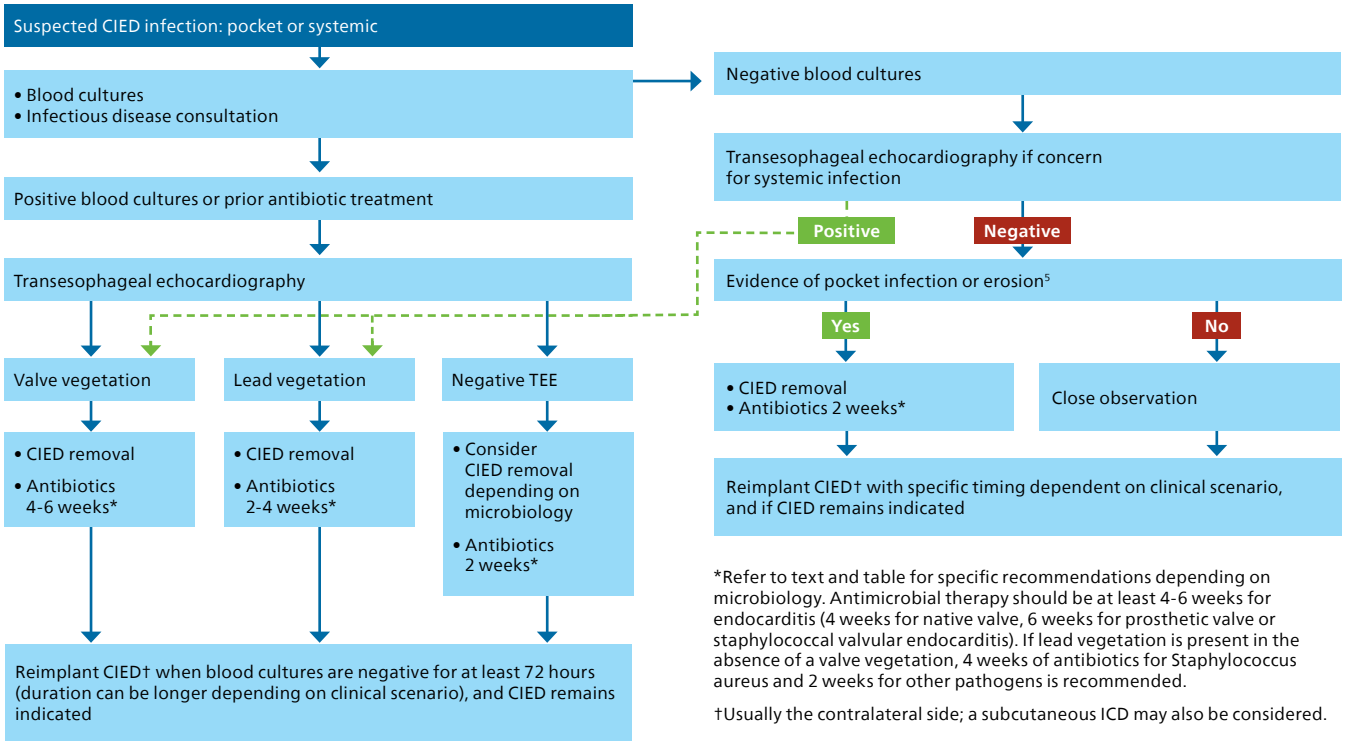
A recent U.S. Medicare analysis demonstrated a lack of guideline adherence with more than 8 in 10 patients with a CIED infection not undergoing complete system extraction.[2] Similar gaps in familiarity of the guidelines were found with physician groups including cardiologists and PCPs. Additionally, there is a lack of care pathways and other mechanisms in place for the management of CIED infection patients at most institutions.

Addressing discrepancies, including guideline education, and streamlining care and referral pathways will be key factors in bridging the gap and improving CIED infection patient outcomes.

CIED infection is an HRS/EHRA Class I indication for referral and for full system removal[3,4]

Among patients with CIED infection, there is a lack of guideline adherence and a need to improve guideline-directed care.[2] Extraction for CIED infection is potentially life-saving. Follow the guidelines.

Infection diagnosis decision trees from 2017 HRS guidelines



*Refer to text and table for specific recommendations depending on microbiology. Antimicrobial therapy should be at least 4-6 weeks for endocarditis (4 weeks for native valve, 6 weeks for prosthetic valve or staphylococcal valvular endocarditis). If lead vegetation is present in the absence of a valve vegetation, 4 weeks of antibiotics for Staphylococcus aureus and 2 weeks for other pathogens is recommended.

†Usually the contralateral side; a subcutaneous ICD may also be considered.

This information is directly from the 2017 HRS Consensus Statement.[3]

Learn more and download a pocket guide of the HRS 2017 guidelines
Philips.com/deviceinfection

1. Birgersdotter-Green, Ulrika, et al. "Contemporary Management of Cardiac Implantable Electronic Device Infection – A Survey of American College of Cardiology Members and Primary Care Physicians (COGNITO Study)" AHA 2022 Clinical Study Presentation. November 5, 2022.
2. Pokorney, Sean D., et al. "Low Rates of Guideline Directed Care Associated with Higher Mortality in Patients with Infections of Pacemakers and Implantable Cardioverter Defibrillators." ACC 2022 Late Breaker Clinical Study Presentation. April 3, 2022.
3. Kusumoto, F. M., et al. (2017, Dec). 2017 HRS expert consensus statement on cardiovascular implantable electronic device lead management and extraction. Heart Rhythm, 14(12), e503-e551.
4. Blomström-Lundqvist, C., et al. (2020, Jun 1). European Heart Rhythm Association (EHRA) international consensus document on how to prevent, diagnose, and treat cardiac implantable electronic device infections-endorsed by HRS, APHRS, LAHRS, ISCVID, ESCMID in collaboration with EACTS. Eur Heart J, 41(21), 2012-2032. https://doi.org/10.1093/eurheartj/ehaa010.
5. Baddour LM, et al. American Heart Association Rheumatic Fever, Endocarditis, and Kawasaki Disease Committee; Council on Cardiovascular Disease in Young; Council on Cardiovascular Surgery and Anesthesia; Council on Cardiovascular Nursing; Council on Clinical Cardiology; Interdisciplinary Council on Quality of Care; American Heart Association. Update on cardiovascular implantable electronic device infections and their management: a scientific statement from the American Heart Association. Circulation. 2010 Jan 26;121(3):458-77. doi: 10.1161/CIRCULATIONAHA.109.192665. Epub 2010 Jan 4. PMID: 20048212.

Philips
3721 Valley Centre Drive, Suite 500
San Diego, CA 92130 USA
www.philips.com/SymphonySuite