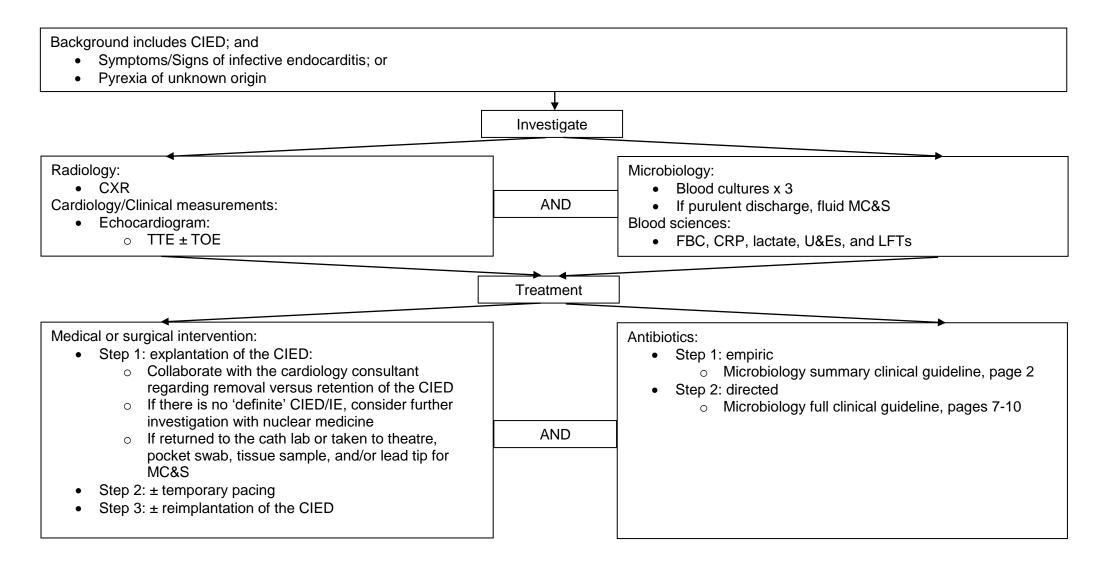


Cardiac Implantable Electronic Device Lead Infection - Microbiology Summary Clinical Guideline

Reference number: CG-ANTI/2019/061





Empiric antibiotics: <u>no</u> clinical concerns regarding sepsis

First line	Vancomycin or teicoplanin intravenously, dose as per hospital guidelines, vancomycin target pre dose level 15-20 mg/l, teicoplanin		
	target pre dose level 30-40 mg/l, and		
	Gentamicin 1 mg/kg intravenously 12 hourly, target pre dose trough < 1 mg/l and target post dose peak 3-5 mg/l, and		
	Rifampicin 300-600* mg per oral 12 hourly		
Second	Daptomycin 8-10 mg/kg intravenously 24 hourly and		
line	Gentamicin 1 mg/kg intravenously 12 hourly, target pre dose trough < 1 mg/l and target post dose peak 3-5 mg/l, and		
	Rifampicin 300-600* mg per oral 12 hourly		
* Rifampicin 300 mg if creatinine clearance < 30 ml/min, 600 mg if creatinine clearance ≥ 30 ml/min			

Empiric antibiotics: clinical concerns regarding sepsis (life threatening organ dysfunction caused by a dysregulated host immune response to infection) secondary to lead infection

First line	Piperacillin tazobactam 4.5 g intravenously 6 hourly and Vancomycin or teicoplanin intravenously, <u>dose as per hospital guidelines</u> , vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 30-40 mg/l
Second line, <u>if non-</u> <u>immediate without</u> <u>systemic involvement</u> penicillin allergy	Ceftazidime 2 g intravenously 8 hourly and Vancomycin or teicoplanin intravenously, <u>dose as per hospital guidelines</u> , vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 30-40 mg/l
Third line, <u>if immediate</u> rapidly evolving or non- immediate with systemic involvement penicillin allergy	<u>Ciprofloxacin</u> 400 mg intravenously 8 hourly and Vancomycin or teicoplanin intravenously, <u>dose as per hospital guidelines</u> , vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 30-40 mg/l



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Consultation with:	Lead Antimicrobial Pharmacist, Microbiology Consultant, Cardiology Consultants for version 1
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Changes from previous version:	Introduction: reworded (minor) and reformatted (minor). Differential diagnosis: reworded (minor) and reformatted (minor). Investigation: reworded (minor), reformatted (minor), and expanded (Echocardiogram, provided by cardiology and clinical measurements; Radiology and nuclear medicine). Criteria for diagnosis of CIED lead infection and/or infective endocarditis. Treatment: reworded (minor) and reformatted (minor). Management: reworded (minor), reformatted (minor). Appendix 1: Gentamicin. References: expanded (minor).
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