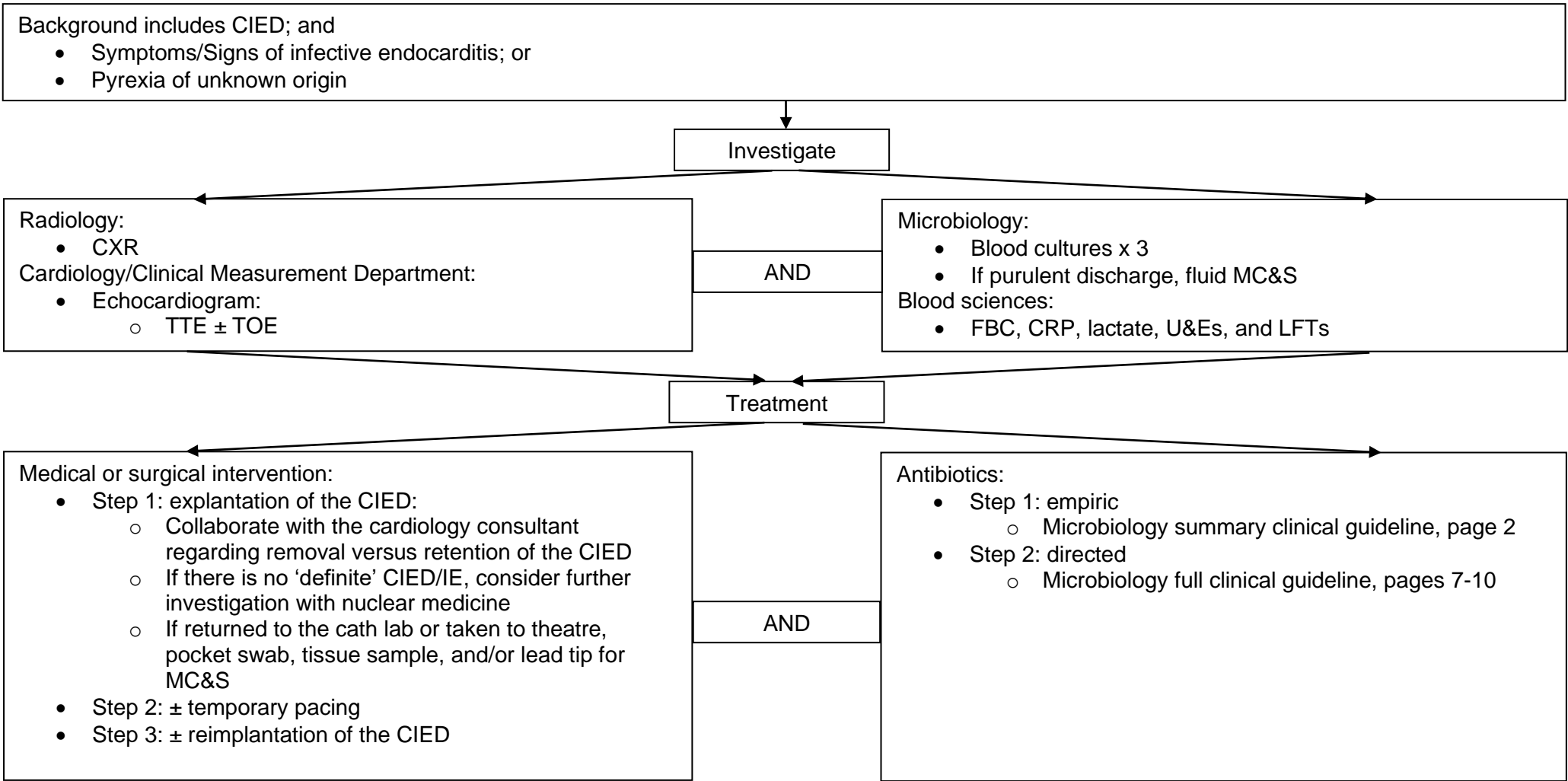


Cardiac Implantable Electronic Device Lead Infection - Microbiology Summary Clinical Guideline

Reference number: CG-ANTI/3475/24



Empiric antibiotics: no 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 3 mg/kg intravenously 24 hourly (NB maximum of 240 mg), target pre dose trough < 1 mg/l, and Rifampicin 300-600* mg per oral 12 hourly
Second line	Daptomycin 8-10 mg/kg intravenously 24 hourly and Gentamicin 3 mg/kg intravenously 24 hourly (NB maximum of 240 mg), target pre dose trough < 1 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, dose as per hospital guidelines , vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 30-40 mg/l
Second line, if non-immediate without systemic involvement penicillin allergy	Ceftazidime 2 g intravenously 8 hourly and 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
Third line, if immediate rapidly evolving or non-immediate with systemic involvement penicillin allergy	Ciprofloxacin 400 mg intravenously 8 hourly and 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

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Document control

Development of guidelines:	Ellie Birnie, Kayleigh Lehal, Dr Peter Slovak
Consultation with:	Lead Antimicrobial Pharmacists, Microbiology Consultant
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Approval date:	Medicine Division Oct 2024
Changes from previous version:	Modification of " gentamicin 1 mg/kg intravenously 12 hourly, target pre dose trough < 1 mg/l and target post dose peak 3-5 mg/l" to " gentamicin 3 mg/kg intravenously 24 hourly (NB maximum of 240 mg), target pre dose trough < 1 mg/l". Modification of references to include 2023 ESC Guidelines for the management of endocarditis. Modification of document control to include Ellie Birnie.
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