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An exposed Cardiovascular Implantable Electronic Device (CIED) complicated with infection: A case report of unconventional experience with 'Sealed CIED'

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Abstract

The rate of infected Cardiovascular Implantable Electronic Device is alarming and causes substantial socio-economic burden. A common approach involves immediate extraction of the infected device. Here, we report an unorthodox approach to this problem by 'sealing' the generator inside a sterile container as a temporary permanent pacemaker while waiting for implantation of another device. We report a 66 years old emaciated lady with underlying Sick Sinus Syndrome, who had an implanted single chamber pacemaker and presented with partial protrusion of her device. She underwent sub-pectoral implantation of the new device but subsequently re-presented with pocket site infection after a month. A decision was made to extract the infected generator from the sub-pectoral pocket and it was sealed inside a sterile container as 'bridging therapy' while awaiting arrival of a leadless pacemaker for implantation together with total extraction of the old infected device. Our clinical vignette demonstrated the difficulties we encountered and influenced on our decision for this unconventional approach despite limited supporting evidence. © 2022, Malaysian Medical Association. All rights reserved.

Index Keywords

sultamicillin; aged, Article, atrial fibrillation, case report, clinical article, debridement, female, follow up, general anesthesia, granulation tissue, human, human tissue, infection complication, pacemaker implantation, plastic surgeon, sick sinus syndrome, skin discoloration, thorax radiography, transthoracic echocardiography, adverse device effect, artificial heart pacemaker, electronics, implantable cardioverter defibrillator, infection, prostheses and orthoses; Aged, Defibrillators, Implantable, Electronics, Female, Humans, Pacemaker, Artificial, Prostheses and Implants, Prosthesis-Related Infections

Chemicals/CAS

sultamicillin, 58694-35-2, 76497-13-7

Tradenames

Micra MC1VR01, Medtronic, United States; Verity ADx XL SC, St Jude, United States

Manufacturers

Medtronic, United States; St Jude, United States

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