



Fast and Simple Method of Placing Atrial Pacing Wires to Minimize Post-Removal Complications

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Surgical Note

Introduction: Epicardial Pacing wires provide a low resistance, reliable sustained connection to the heart after surgery. There is increased failure to sense and capture with time due to the inflammation at the wire-myocardium interface which is accelerated if higher energies are used [1]. Another issue is the small but significant incidence of bleeding post removal ranging from 0.09 to 0.18% [2,3] resulting in the need for surgical intervention which may potentially result in major morbidity or mortality. This method enhances the contact surface for electrical stimulation and can be used easily in minimally invasive surgery instead of inserting sutures which require knots.

Methods: We propose a novel method using Titanium Haemostatic surgical clips from Peters Surgical, France, Size Medium and variable number from 1 to 3 were utilised to secure atrial pacing wires (Figure 1). We conducted a retrospective review of all cardiac operations including redo operations with epicardial leads from 2007 to 2022 in 1557 patients. Pacing wires were removed while the patient is on Aspirin and prophylactic DVT anticoagulation or INR below or equal to 2.5 on Day 4 or longer.

Results: There was not a single incidence of bleeding from Atrial pacing wire site for which any intervention was carried out.

Conclusion: Our method is a quick, simple and demonstrably safe way of placing Atrial pacing wires. This method has a quick and dual benefit of enhancing electrical surface contact between wires and atrial myocardium hence positively impacting the duration of use and secondly not resulting in any major morbidity or mortality.

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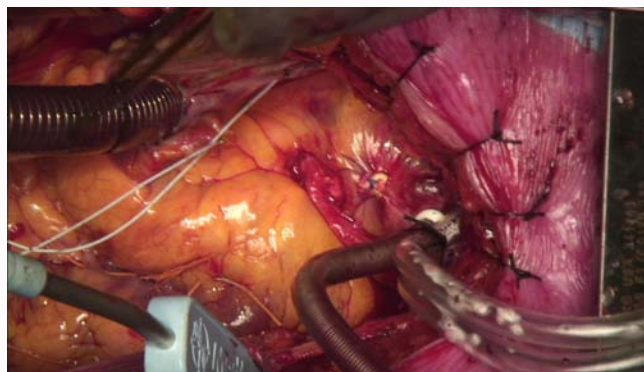


Figure 1: Pacing wires were removed while the patient is on Aspirin and prophylactic DVT anticoagulation or INR below or equal to 2.5 on Day 4 or longer.

References

1. Elmi F, Tullo NG, Khalighi K. Natural history and predictors of temporary epicardial pacemaker wire function in patients after open heart surgery. *Cardiology.* 2002;98:175-80.
2. Cote CL, Baghaffar A, Tremblay P, Herman C. Incidence of tamponade following temporary epicardial pacing wire removal. *J Card Surg.* 2020;35(6):1247-52.
3. Bougioukas I, Jebran AF, Friedrich MGM, Tirilomis T, Schoendube FA, Danner BC. Is there a correlation between late re-exploration after cardiac surgery and removal of epicardial pacemaker wires? *J Cardiothorac Surg.* 2017;12(1):3.