

Intramural haematoma and dissection following idiopathic VT ablation

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1 Introduction

A 48-year-old male underwent ablation for posterior fascicular ventricular tachycardia (VT).

2 Methods and results

Ablation was performed in sinus rhythm using a thermocouple catheter at the exit site [1]. A line of lesions was also created from the mid-septum to the inferior border of the heart at the intersection of the middle and distal third of the septum [2]. Radiofrequency (RF) energy was delivered at 40W and for 30 s at each spot. Following ablation, the patient became hypotensive. Echocardiogram revealed pericardial effusion with tamponade.

During exploratory surgery, a large haematoma was noted on the anterolateral wall of the left ventricle (LV) with epicardial disruption (Fig. 1). After haemostasis was secured, the patient was transferred to intensive care. Three hours later, he collapsed and eventually perished.

Post-mortem examination showed a ruptured septal branch of the left anterior descending artery resulting from RF ablation, leading to bleeding into the myocardium. This intramural haematoma had dissected through to the epicardium and the anterolateral LV.

3 Discussion

This is a rare complication of RF ablation for idiopathic LV VT which has hitherto not been described. RF ablation is safe, effective and curative [3].

Coronary artery rupture resulting from endocardial ablation within the LV is exceedingly rare.

It is uncertain if this complication could have been avoided. Specifically, a non-irrigated catheter was used

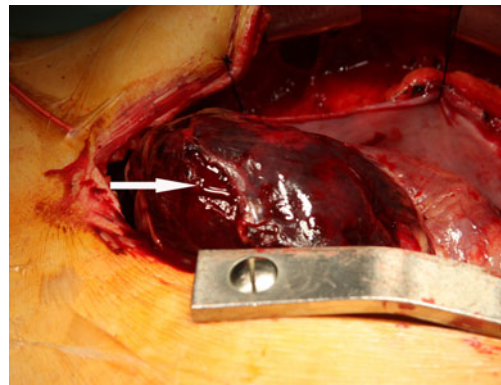


Fig. 1 Intraoperative picture showing the haemorrhagic surface of the left ventricle. *Arrow* points to the disrupted epicardium with blood oozing out

and the ablation line was in the expected location as confirmed at post-mortem. Electrophysiologists need to be aware of such a potential complication during ablation for idiopathic VT.

4 Conclusion

Coronary artery rupture leading to intramyocardial bleeding and dissection is a potential fatal complication of ablation for idiopathic ventricular tachycardia.

References

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