The Use of Strong Magnet to Switch Off ICD in Urgent VT Ablation

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Introduction: ICD was indicated in patients with high risk of arrhythmia and for secondary prevention in patients with history of ventricular arrhythmia. Ablation was recommended for those with ICD shock to reduce future shock events. During catheter ablation, ICD should be switched off to allow VT mapping and ablation.

Methods: N/A.

Result: A 60-year-old man with three-vessel CAD on ICD, CHF low EF (28.8 %) with LV apical thrombus, history of VT/VF on ICD, acute on CKD, and pre-diabetes, experienced VT storm and multiple appropriate ICD shocks in 24 hours. (Figure A) Patient was implanted in other hospital and come in our centre within long holiday period. We currently do not have the corresponding ICD programmer in our centre, and since it was on holiday, difficulties exist in asking for another programmer from the vendor. By chance, we have other vendor’s complete programmer with an available strong magnet. (Figure B) The strong magnet works well in switching off the ICD, and we were able to perform VT ablation successfully. (Figure C)

Conclusion: Strong magnet can be used to forced switch Cardiac Implanted Electronic Device (CIED) to VOO modes most of the time. The application of strong magnet is cross-platform and does not need special programmer, which is proven to be useful at times of emergency.