

How do partners of those receiving shocks from an Implantable Cardioverter Defibrillator experience episodes of electrical storm

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Likelihood of having a shock

- Likelihood of receiving a shock is quoted variously between 10-19% in the first year post-implant
- Figures for a true VT storm quoted as around 10-30%
- Inappropriate shocks are 5-7%

Figures from various literature reviews



Effect of having an ICD shock

- What is having a shock like (preparation)
- Like a kick in the chest/back
- 1 shock is sometimes tolerable
- Multiple shocks are devastating
- Anticipation of having more shocks (anxiety/stress)

Multiple shocks

- Electrical storm is defined as the occurrence of three or more distinct episodes of VT and/or VF within a 24-h period, either resulting in a device intervention or monitored as a sustained VT (≥ 30 s).^{18–20} Some authors have set an arbitrary 5 min interval between VT/VF episodes to define ES.²⁰

Management of patients receiving implantable cardiac defibrillator shocks: Recommendations for acute and long-term patient management Europace 2010



Causes of multiple shocks

Causes of multiple shocks (electrical storm)

Appropriate

- VT/VF storm haemodynamically compromised

Unnecessary

- VT non-compromised (ATP only)
- VT therapy not programmed effectively

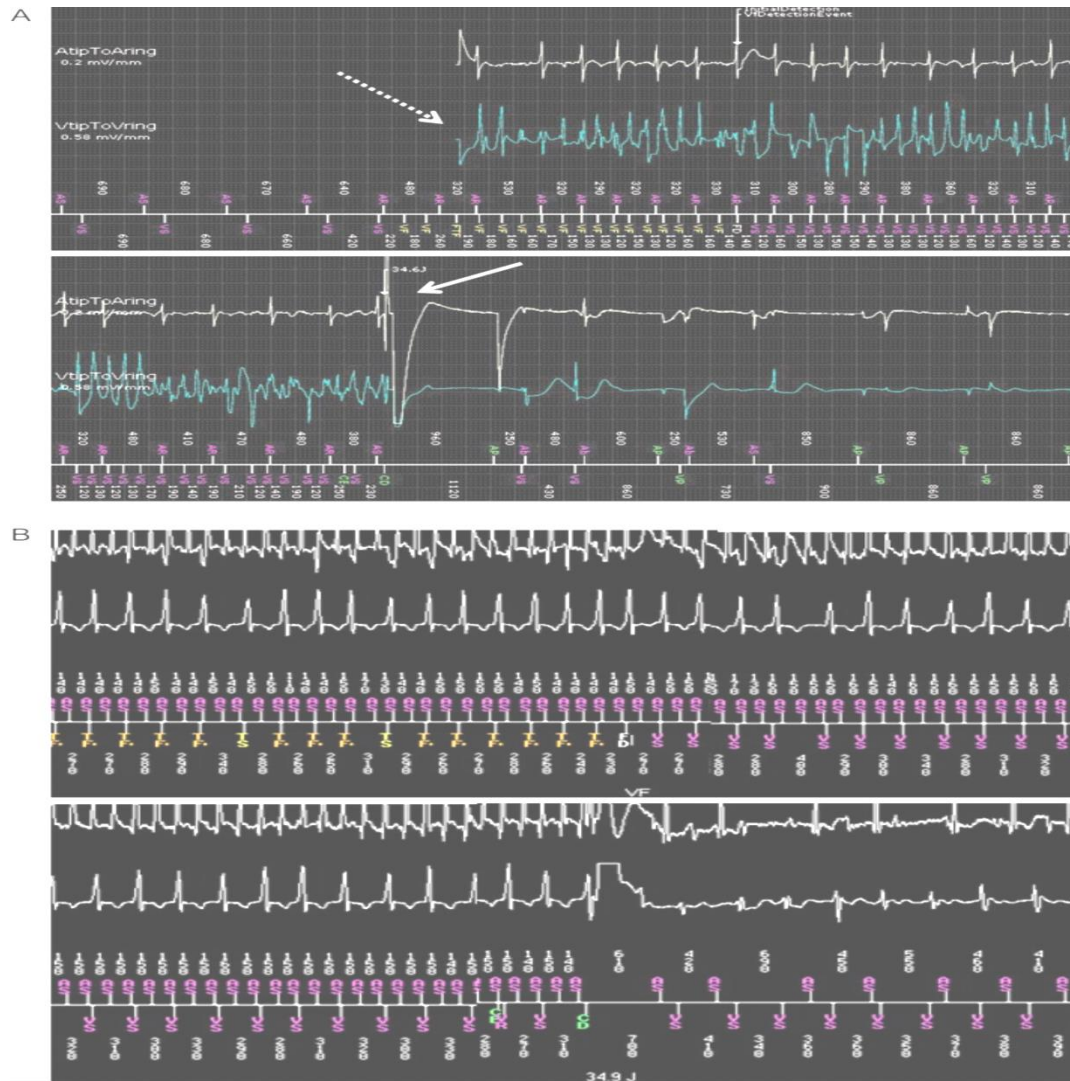


Multiple shocks

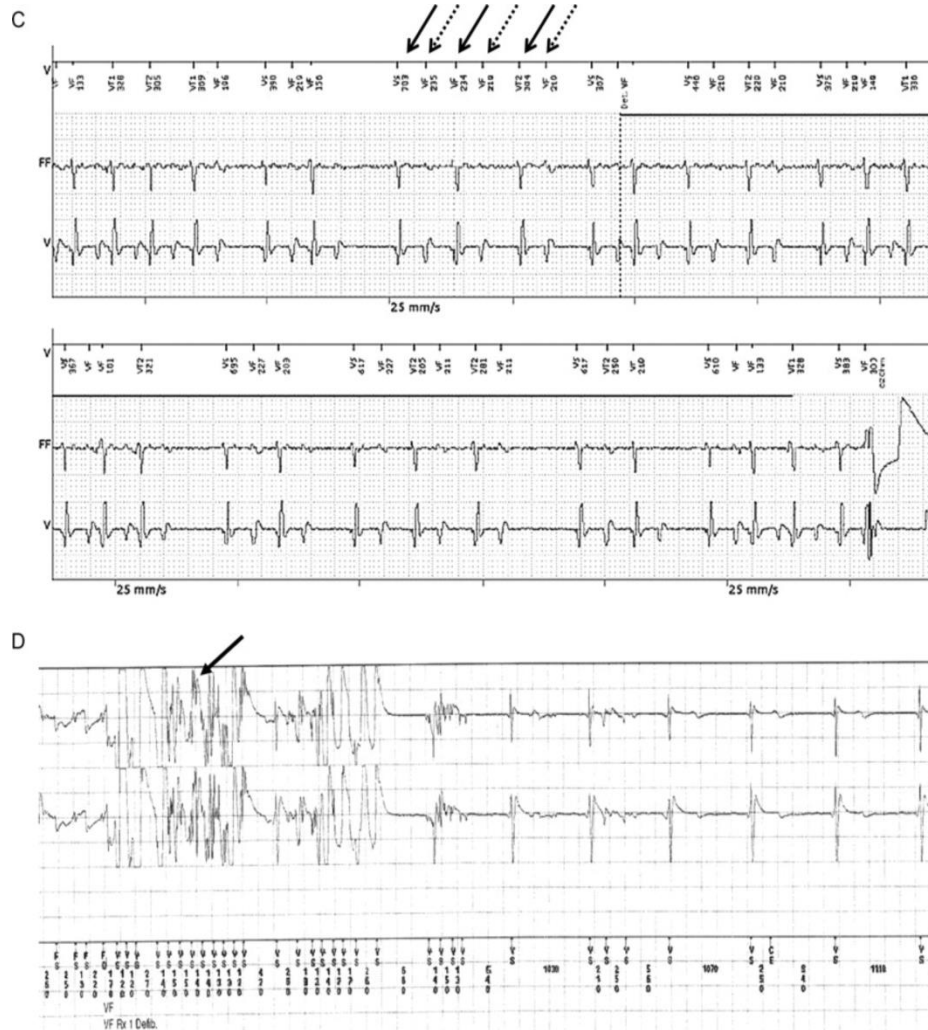
Inappropriate 5-7% Used to be 20-30%

- Lead/device problem ?40%
- Atrial fibrillation/Flutter
- AVNRT
- Sinus tachycardia
- Over-sensing T wave/ Myopotential
- EMI





From: Management of patients receiving implantable cardiac defibrillator shocks Recommendations for acute and long-term patient management
 Europace. 2010;12(12):1673-1690. doi:10.1093/europace/euq316
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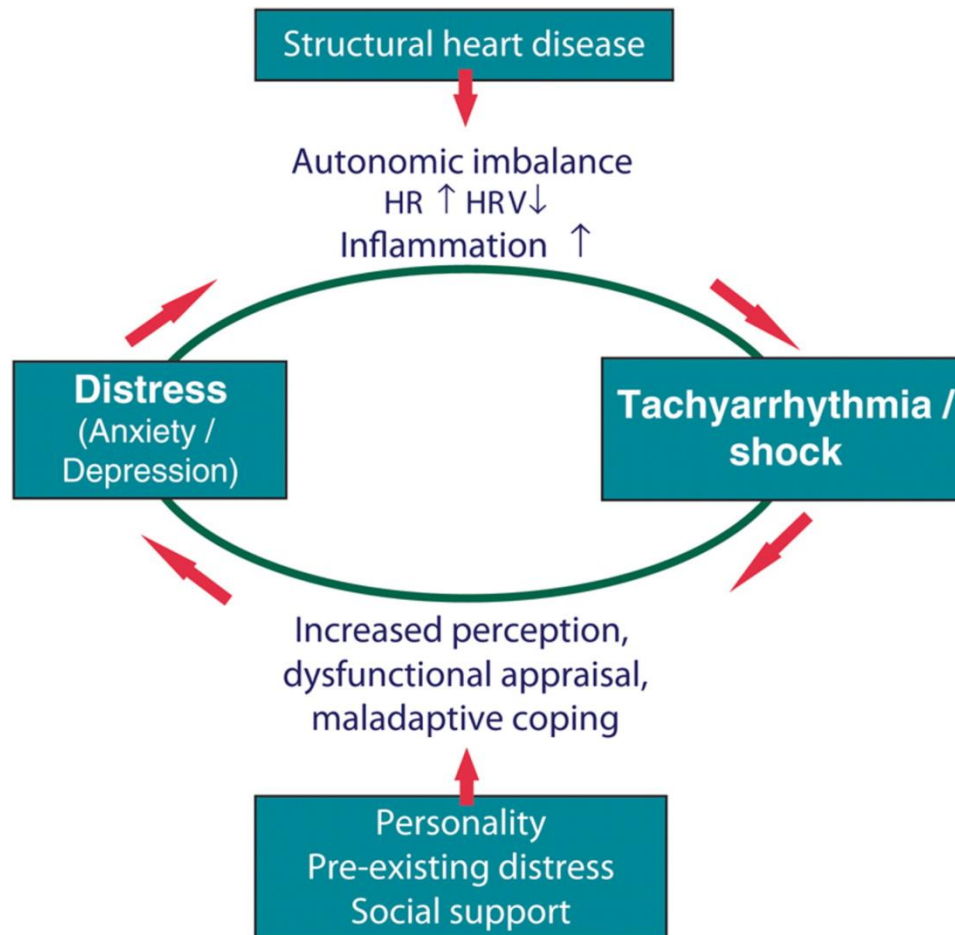


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Psychological effects

- Patients who experience ICD shocks have increased levels of psychological distress, anxiety, anger, post-traumatic stress disorder, and depression as compared with patients who do not receive shocks, and these psychological sequelae may be a contributing factor to the increased mortality seen in patients who receive ICD shocks





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Issues for partners

- Fear of losing partner
- Fear of worsening condition
- Fear of dependency
- Fear of re-occurrence
- Lack of control
- Lack of understanding of cause
- Over-compensation on return to normal life
- Apprehension of physical activity/sex



Post shock issues

- PTSD partner and patient
- Need detailed explanation
- Loss of confidence in device (inappropriate shocks)
- ?Removal of ICD
- Counselling CBT Rehab.
- Building confidence



Issues for partners

We do not allow enough time for pre and post counselling and this is essential for patient and partner

- Need for support pre and post implant
- Education about shocks
- Use of magnet in emergencies
- Emergency help lines
- Support groups/peer/professional support

Guidelines for management

- Hospital and emergency services awareness of what to do in ICD emergencies
- Need for increased partner and patient support
- Peer support from support groups

Literature review

- Several publications going back to the 2000's
- Early references to PTSD Sears et al
- Recommendations for patient management Europace 2010
- Anxiety and Depression in Patients With an Implantable Cardioverter Defibrillator and Their Partners PACE 2013
- 2015 Recovery post implant – impact on patient and partner

Very little reference to partner other than in a patient supportive role

