

**SUFFERING RECURRENT ICD SHOCKS VENTRICULAR ARRHYTHMIA
ABLATION CAN HELP – SMASH THE VT TO PAUSE SCD :**

Implantable cardiac defibrillator(ICD) : A pacemaker like device which monitors for occurrence of ventricular tachycardia / ventricular fibrillation and tries to correct it by overdrive pacing or giving electric shocks.

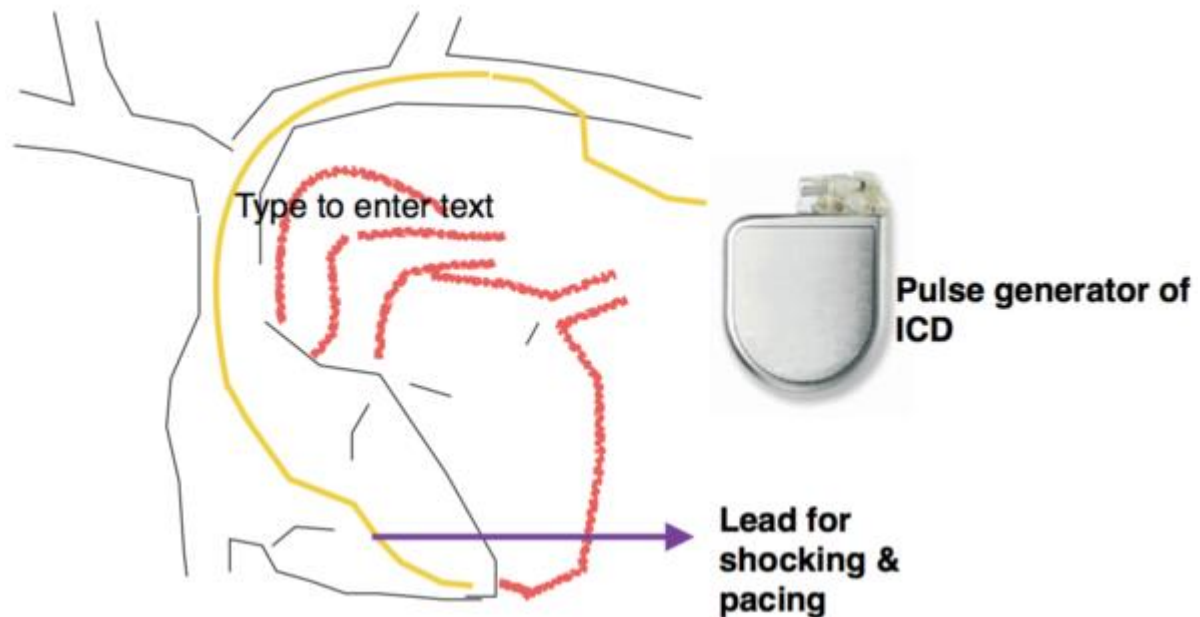


Figure 5 : Implantable cardiac defibrillator consists of a battery placed under skin and a lead placed inside heart for sensing the arrhythmia and providing shock & pacing as required.

Remember ICD is a preventive therapy and not a curative one. Real cure lies if the arrhythmic circuits or foci can be killed permanently to stop abnormal electric firing in heart. This may be possible in some cases and those with structurally normal heart which may not need an ICD then. It has been scientifically proven that in patients with monomorphic VT from cardiomyopathy of varied causes, early first-line catheter ablation performed concurrently with ICD implantation significantly reduced VT recurrence, cardiovascular hospitalization, or death. Also, Shocks delivered through these implanted devices to cardiovert ventricular tachycardia or to defibrillate ventricular fibrillation are although life saving, painful, often poorly tolerated & not without at least transient detrimental effect to the heart in terms of myocardial dysfunction. Patients with significant left ventricular dysfunction at baseline appears to be at most risk. In cases of arrhythmic storm (multiple runs of arrhythmia) ICD may give multiple shocks to cause severe myocardial stunning or battery depletion. So it is better to kill arrhythmic ventricular

arrhythmia circuit and consider for ICD depending on risk for sudden cardiac arrest rather than keep sitting on a ticking bomb of arrhythmic circuit waiting for arrhythmic storm / explosion.



WHY TOLERATE ICD SHOCKS WHEN YOU CAN SMASH VENTRICULAR ARRHYTHMIAS – SMASH VT to PAUSE SCD

Ventricular arrhythmias in structurally normal hearts can be cured by catheter ablation and in many cases ICD may not be required. Ventricular arrhythmias are a common cause of death , hospitalisation & impaired quality of life in structural heart disease. Implantable cardioverter defibrillator devices effectively terminate VT episodes but do not prevent or mitigate the risk of their occurrences.

Don't Wait, Ablate to Prevent VT Episodes After an ICD Shock?

It has been scientifically proven that early catheter ablation reduced deaths and ICD shocks in PARTITA trial. Also those patients who have ICD should be aware of shocks and ventricular arrhythmia ablation improves survival after an ICD shock. Catheter ablation can kill abnormal electric substrate and circuits responsible for abnormal ventricular rhythms which leads to ICD shock.

Ventricular tachycardia(VT) ablation uses cold or heat energy to create tiny scars in the heart to block faulty signals that cause a rapid erratic heartbeat. Ventricular tachycardia occurs when the heart's electric signals cause the lower heart chambers (ventricles) to beat too quickly. The success of VT ablation varies , depending on the patient's specific heart condition that caused VT. The procedure is most effective in patients with otherwise normal hearts, in whom the success rate exceeds 90%.

ARRHYTHMIA SUPPORT NETWORK : Pulse is Life



A-Fib, Sudden Cardiac Arrest Support Network: Act Fast Keep Beating

The noblest question in the world is what good may I do in it. *Benjamin Franklin*

Education is greatest weapon for change : This message has been issued in public interest by arrhythmia support network (<https://arrhythmiasupport.com>). Dr Rohit Walia is senior consultant cardiology available exclusively at Christian Medical College Hospital , Ludhiana, Punjab and is available in person to poorest of poor patients or teleconsultation to remote patients.