CASE PRESENTATION

VT storm ablation
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Electrical storm

• Definition
  ➢ ≥2 separate VT/VF episodes or ≥3 appropriate ICD therapies for VT/VF in a 24-h period

• Management
  ➢ tailored to the underlying mechanism

• classification
  ➢ monomorphic VT , polymorphic VT/VF
  ➢ structural heart disease
Mr. K.A is a 59 yrs old male, not DM not HTN not known IHD, presented to our ER with attack of wide complex tachycardia.

12 lead ECG showed a regular WCT with LBBB morphology transition at V3, inferior axis.
• After trial of medical cardioversion with IV amiodarone, the patient became drowsy and BP started to drop, he received a DC shock after which sinus rhythm was restored.
After DC: normal sinus rhythm, HR 75/min, left axis deviation, inverted T wave I,aVL, Q wave in chest leads.
• Echocardiography showed
  Dil LV internal dimensions, 7.6/5.2
  Global hypokinesia
  thinned out aneurysmal anterior septum
  and apex

• CA done showed non significant mid LAD lesion with
  minimum spontaneous dissection to which a stent was
  deployed
The patient remained symptom free for 2 days, then recurrent attacks of WCT, requiring multiple DC shocks.

Emergency 3D mapping and ablation was done the following morning.

CA was done on table showed patent stent.

3D Mapping

- Voltage mapping was performed showing a big scar in the anterior septum and apical regions.
- Refinement of the voltage mapping showing area of LAVA (local abnormal ventricular activation) that was successfully isolated.
With standard protocol (0.5-1.5 mv) dense scar in the anterior wall with no viable tissue

Refinement of the voltage threshold showed viable tissue within the scar (potential conduction channels for VT)
Scar DE channeling during sinus rhythm showed one channel in the mid anteroseptal region (potential isthmus of the VT)
Although surface ECG suggested RVOT origin of tachycardia, mapping the RV showed healthy tissue with no scars.
Post ablation study showed successful ablation with no induction of tachycardia.

The patient remains tachycardia free since