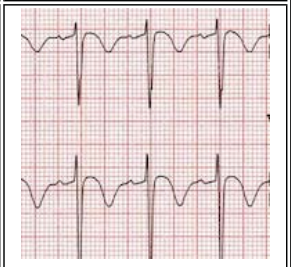
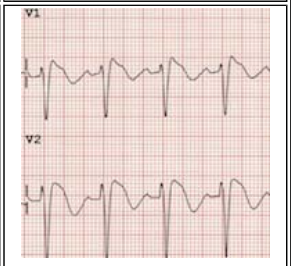
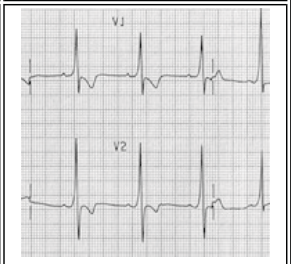
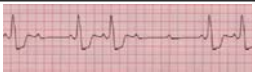
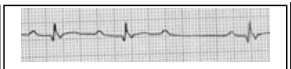
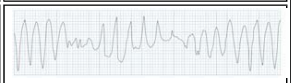
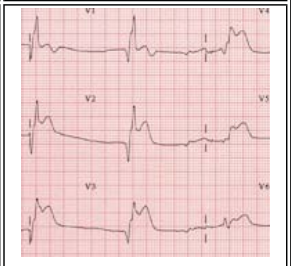
Eponymous Cardiac Syndromes

Syndrome	ECG	Pathology	Clinical Significance	Images / References
Wellens	Proximal critical stenosis of LAD artery	Symmetrical deeply inverted T waves in V2-3 or Biphasic in V2-3 with minimal ST elevation.Changes occur in pain free state and normalise when pain	Acute anterior MI if untreated	
Brugada	Sodium channelopathy.40% familial (autosomal dominant)	RBBB with ST elevation in V1-3. Convex and concave ST variants	Risk of sudden death, mandates urgent ICD	
Wolff-Parkinson White	Pre-excitation syndrome.Re-entrant bundle of AV tissue distant to AV node.	Short PR interval; Prolonged QRS and slurred upstroke of QRS complex (Delta wave).“Type A” shows positive QRS in V1 (LV accessory). Upright positive delta wave in all precordial leads with a resultant R greater than S amplitude in lead V1“Type B” shows negative QRS in V1(RV accessory). Predominantly negative delta wave and QRS complex in leads V1 and V2 and becomes positive in transition to the lateral leads resembling LBBB.	Risk of Atrial arrhythmias being transmitted abherrantly causing VF or VT.Requires ablation of pathwayClinical Case WPW 001	 
Mobitz II	A-V blockPR of constant interval	Constant PR interval until P waved dropped with P-P interval twice normal	Likely to progress to CHB	

Wenckebach	A-V blockPR of increasing interval	Lengthening PR interval until P waved dropped with P-P interval variable. Grouped beats	Need follow up but less likely to progress to CHB	
Lown-Ganong-Levine	Pre- excitation syndromeRe-entrant bundle of AV tissue close to AV node .	Accessory pathway is down James fibres.No Delta wave as conduction normal down Bundle of His	Risk of AF being transmitted abherrantly causing VF or VT.Requires ablation of pathway as WPW	
Romano - Ward	Inherited Long QT syndrome (Autosomal dominant)Defect of Na and K channels.**Not** associated with deafness	Long QT, T wave alternans, notched T wave, R on T phenomenon, Torsades	Risk of Torsades. Electrolyte optimisation, may require ICD	
Lange–Neilson and Jervelle	Inherited Long QT syndrome. Autosomal recessive defect of Na and K channels.Associated with neurosensorial deafness.	Long QT , T wave alternans, notched T wave, R on T phenomenon, Torsades	Risk of Torsades.Electrolyte optimisation, may require ICDAssociated with syncope, and sudden death	
Sgarbossa criteria	Derived from GUSTO 1 trial to identify MI in paced or LBBB patients	ST elevation >1mm concordant with QRS complex (5pts), ST depression >1mm in V1-3 (3pts), ST elevation >5mm discordant with QRS 2 points. >3 points consistent with MI	Help risk stratify patients with chronic LBBB presenting with ACS symptoms	
Tako Tsubo	Cardiomyopathy with hypertrophic LV inferior and Hypotrophic superior wall (Octopus jar heart)	ECG changes as MI but usually brought on by stressful event	Normal angiogram but require cardiology follow up	

About Mike Cadogan

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