

Types of arrhythmia

Tachyarrhythmia Bradyarrhythmia

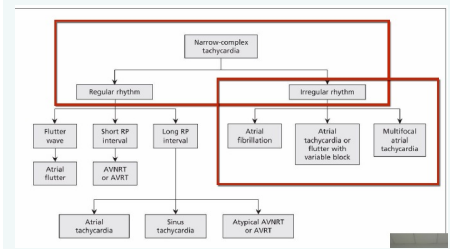
Types and their feature

Sinus node Dysfunction	AV block
Sinus bradycardia: <i>Normal</i>	1st degree: <i>PR interval prolong, no need treat, Rheumatic fever</i>
Sinus arrest: <i>No atrial deP and ventricular asystole</i>	2nd degree (Mobitz 1): <i>prolong PR until no QRS (no ventricular beat), disappear with exercise and atropine, normal</i>
Brady-tachy syndrome: <i>Slow, fast rates</i>	2nd degree (Mobitz 2): <i>regularly no QRS, pathological</i>
Chronotropic incompetence: HR drop quick after activity**	3rd degree: <i>complete AV dissoaciation, A and V contrx ont their own, haemodynamically unstable</i>

Types

Narrow-complex tachycardia	Broad-complex tachycardia
QRS <100ms	QRS >100ms
SUpraventricular origin	ventricular origin or dt aberrnt conduction of supraventricular

Narrow complex tachycardia



NCT

Atrial fibrillation

Disorganized atrium contraction
ECG chaotic
P wave almost absent

Atrial flutter

ECG sawtooth (2p, QRS, 3p, QRS)
P wave more than 1

Multifocal atrial tachycardia

P wave all over the place

AV Node re entry tachycardia

Common, female, any age
Short RP interval or invisible P wave

Atrioventricular re-entry tachycardia

Wolff Parkinson White Syndrome
Accessory pathway causing pre-excitation (Delta wave - before QRS)

Atrial tachycardia

P wave ectopic origin
abnormal P wave axis

NCT (cont)

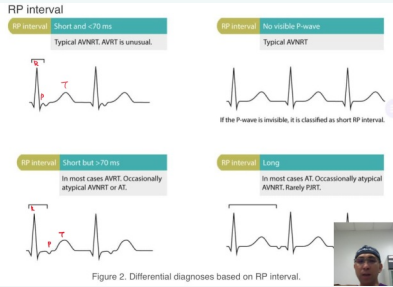
Sinus tachycardia

Normal P wave:

- (-) AVR
- (+) V2,3,AVF

PR interval in P wave before QRS

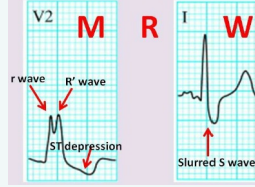
DDx RP interval



Right bundle branch block

Right Bundle Branch Block (MARROW)

Lead V2: Shows the characteristic secondary R' wave in a complex known as r S R'. The R' is late right ventricular depolarisation. Note the M shape of Marrow



Lead I: Shows the characteristic slurred S wave which is how delayed right ventricular depolarisation manifests in the lateral lead. Note the M shape of Marrow

Ventricular tachycardia (VT)

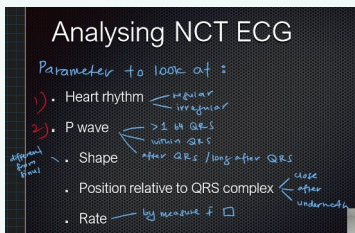
More likely VT

- Horizontal entry to ER
- Old person
- Chest pain & unconscious

Key features ECG

- Capture beat
- Fusion beat
- P waves in AV dissociation
- Cpncordance

Approach to NCT ECG



Broad complex tachycardia

Broad Complex Tachycardia

>Regular

- VT (Important first diagnosis)
- SVT with Aberrancy
 - Bundle Branch Block
 - Accessory pathway e.g WPW

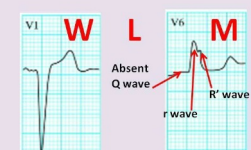
>Irregular

- Atrial Fibrillation with Aberrancy
 - Bundle branch block
 - Accessory pathway e.g WPW

Left bundle branch block

Left Bundle Branch Block (WILLIAM)

Lead V1: A widened abnormal QRS complex. Note the W shape of William



Lead V6: Shows the characteristic r S R' complex. Absent Q waves in lateral leads is singular to LBBB. Note the M shape of william.