Management of Arrhythmias
The General Practitioners role

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Arrhythmias not common

Palpitations are

Not all patients with arrhythmias present with palpitations
Arrhythmias can have varied presentation

**Palpitations**
- Dizziness/Faintness
- Chest pain
- Shortness of breath
- Collapse
- Sudden Cardiac arrest

**Fast or slow pulse**

**Irregular pulse**
- Peripheral vasoconstriction
- Hypotension
- Acute heart failure
- Altered level of consciousness

Presence of any one or more of the above clinical features is an indication for an urgent ECG
When patients present with palpitation –

- Tachycardia
- Bradycardia
- Ectopics
Pt with Tachy ECG

Narrow complex

Broad complex
Identification of narrow complex tachyarrhythmias

Narrow complex <120ms - 3 small squares

Broad complex >120ms
Tachy ECG

Narrow complex
- Stable
  - Carotid Sinus massage
    - Terminates
      - Yes
        - BB/Ca ChB
          - Direct to Hospital
          - Refer
      - No
        - IV line
          - Cardiac massage
            - Transfer to ETU
            - Direct to Hospital
    - Unstable

Broad complex
- Stable
  - Transfer to hospital

Unstable
- Precordial thump
  - Yes
    - Refer
  - No
Narrow complex tachy

- **1st episode** – relatively asymptomatic, short lived (spontaneous termination), No co-morbidity
  - Reassure and follow up (document ECG)
- **>1 episode**, severe symptoms (syncope, angina), Hx of IHD, Ht failure
  - Rx with BB (bisoprol, metoprolol) or CaCh blocker (verapamil)
  - Refer – RF Ablation offers a cure in most cases
Wide complex tachycardia

- Always consider as Ventricular Tachycardia
  - Try to get 12 L ECG
  - Always refer
    - Coronary interventions/CABG
    - RF ablation
    - ICD implantation
Irregular tachycardia

- Atrial Fibrillation
- Atrial flutter
- Ectopics (Atrial/Ventricular)
Atrial fibrillation

- **Why – underlying cause**
  - Old age
  - Hyperthyroidism
  - IHD
  - MV disease

- **Need for cardioversion/rate control**

- **Need for anticoagulation - CHA$_2$DS$_2$-VAS**
AF cont.

- TSH – FT3, T4
- 2D Echo
- Needs referral
Ectopics

- Atrial/SVEs
- Ventricular ectopics

Needs further evaluation if

- Frequent
- Symptomatic Severe palpitations, presyncope, synope, angina
- Hx of IHD/MI
- Evidence of Ht failure
Tachycardia

Narrow complex
- Unstable – Cardiovert
- Stable – Carotid
- massage
- B blockers/Ca Ch blockers
- Refer for RFA

AF
- Cardiovert
- Rate control
- Anti-coagulation

Broad complex
- Always Rx as VT
- Unstable – cardiovert
- Needs referral

Ectopics
- RX if -
- Symptomatic
- Frequent
- Underlying heart disease
Brady-arrhythmias

- Sinus Node dysfunction - SSS
- AV Node dysfunction - Heart block
Bradycardia – HR <60bpm

If evidence of acute MI refer for MX
Admit for in-ward referral

Refer to OPD Cardiology/EP clinic

HR <40bpm
Atropine 0.6mg IV – can be repeated up to total of 3mg

12 Lead ECG No
Diagnosing a Pt presenting with no documented tachyarrythmia

- Palpitations or not?
- Hx of palpitation
- ECG
- Echocardiogram
- Holter
- Ex. ECG
- Loop recorders

- Age of onset
- regional wall motion abnormalities
- Rhythm
- hypertrophic/dilated cardiomyopathy
- Syncope/pre-syncope
- congenital abnormalities
- H/O IHD
- mitral valve disease with atrial dilatation
- SCD in family
- right ventricular dysplasia
Resting 12L ECG

- Short PR/Pre-excitation
- Varying PR intervals
- Varying p wave morphology
- Atrial ectopics
- Ventricular ectopics
- Long/short QT
- Brugada syndrome
- Early repolarisation
Mx Algorithm for undocumented Palpitations

Likely SVT
- Rx with BB/CCB
  - No response or pt preference
    - RF ABL

Likely VT
- Assess with echo/Ex ECG
  - Cardiomyopathy
    - Scar related
  - VT ABL
  - ICD

Indefinite
- Diagnostic EP study
  - Reversible Ischaemia
    - Revascularisation
Take home messages

You CAN treat arrhythmias

- Unstable patients need urgent Rx by YOU
- Stable patients need initial Rx and advice from YOU
- Important to refer some patients
Thank you