

palpitations

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Definition

an awareness of ones heartbeat that is thought inappropriate to the circumstances'



Causes

Hyperdynamic circulation

- valvular incompetence
- thyrotoxicosis
- hypercapnia
- pyrexia
- anemia
- pregnancy

Sympathetic overdrive

- panic disorders
- hypoglycemia
- hypoxia
- Antihistamines
- anemia
- heart failure
- mitral valve prolapse

Cardiac dysrhythmias

- premature atrial contraction
- junctional escape beat
- premature ventricular contraction
- atrial fibrillation
- supraventricular tachycardia
- ventricular tachycardia
- ventricular fibrillation
- heart block

Anxiety

- can also cause palpitations in that the heart muscles are affected by the state of one's mind.



Diagnostic pathway

Diagnostic pathway

- History
- Examination
- Resting ECG
- ECG with symptoms
- Additional investigations

History

- Frequency
- Onset / offset characteristics
- Perceived rate
- Description of regularity
- Duration
- Associated symptoms
- Aggravating / relieving factors

History

- Alarm features (Referral indicated)
 - Exercise induced
 - Associated syncope
 - Chest pain
 - Family history of sudden cardiac death
 - Underlying structural heart disease

History

- Past history
- Drug history including OTC medicines

Decongestants (ephedrine)

Alcohol

Cardio-active drugs (QT interval ?)

Examination

- Cardiovascular

 - Pulse

 - Blood Pressure

 - Heart murmurs

 - Signs of left / right ventricular dysfunction

- Features of endocrine abnormality

Resting ECG

- Features to check

Sinus rhythm / arrhythmia

PR interval

QRS duration

ST segment shape (LVH)

T waves (? Cardiomyopathy)

Additional Investigations

- **Capturing an ECG with symptoms**

12 lead ECG taken with symptoms

24 hour > Holter monitoring

Cardiomemo (patient activated device)

Implantable loop recorder (ILR)- REVEAL

Electrophysiological stimulation

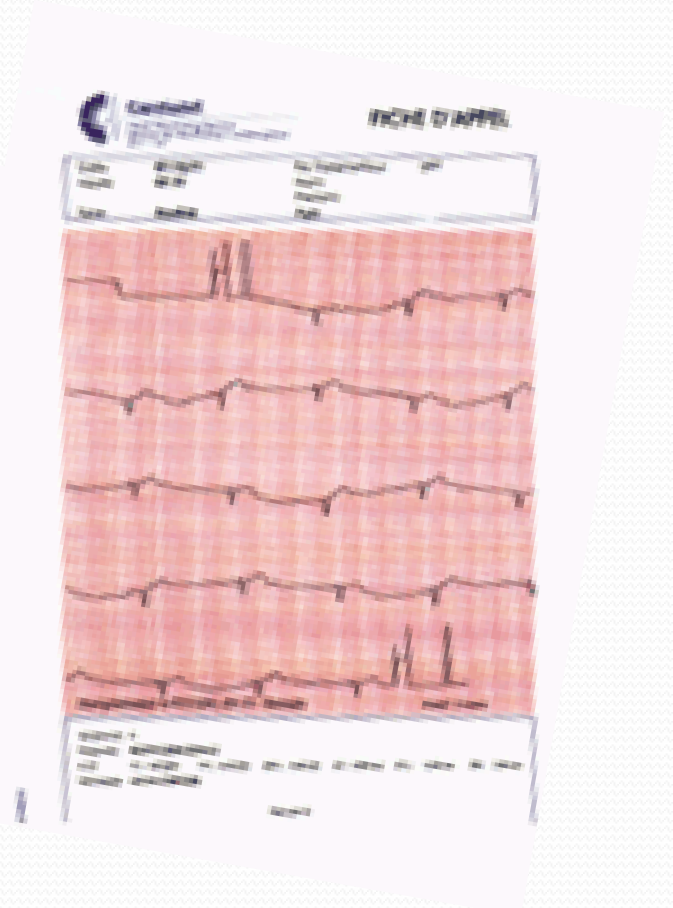
Holter monitoring (24hrs >)



Most of use if symptomatic during study

May detect asymptomatic abnormalities

Cardiomemo (patient activated device)



Infrequent symptoms which have duration >few minutes and are reasonably tolerated

Implantable Loop Recorder

REVEAL device



Unit cost of Holter monitoring £75 / 24 hours

Unit cost of ILR £2000

However for symptom ECG correlation Holter monitoring is 4-5x more expensive

Management

- Assure psychic patient.
- Stop accused medications.
- Treatment of the cause

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