Palpitations

Causes of palpitations	
Cardiac arrhythmias	Extra-systoles (ventricular or supraventricular); tachycardias (ventricular or supraventricular, includes AFib and atrial flutter); bradyarrhthmias (sinus bradycardia, av block – less likely to be perceived as palpitations)
Structural heart disease	Valvular pathology, congential heart disease, cardiomyopathy, heart failure
Psychosomatic causes	Anxiety, panic, somatisation disorders, depression
Systemic causes	Hyperthyroisdism, hypoglycaemia, fever, anaemia, pregnancy, menopause, postual orthostatic hypotension syndrome, phaechromocytome, hypovolaemia
Medication, illicit drugs and substances	Sympathomimetic agents (beta-agonists e.g. salbutamol; antimuscarinics e.g. amitriptyline; vasodilators e.g. calcium channel inhibitors; drugs which can prolong QT interval e.g. erythromycin); withdrawal of beta-blockers, alcohol, nicotime, illicit drugs (cocaine, cannabis, amphetamines); caffeine (cola, coffee, tea, energy-drinks)

HISTORY

Nature and frequency of palpitations:	What so they mean by palpitations? *Check that the patient is describing actual palpitations and not chest discomfort from other conditions (dyspepsia, angina)* Fast, irregular or missed beats? Ask patient to tap out the rhythm; How often do they occur? How long do they last? How do they end?
Palpitation triggers	can they be provoked? When do they occurs? (Palpitations during/after exertion suggest serious pathology e.g. cardiomyopathy, ischaemia)
Associated symptoms	syncope or near-syncope? (indicates serious pathology); chest pain, sweating or breathlessness? Fever
Severity	can the patient carry on as normal or do they need to sit/lie down?
PMH	conditions associated with tacharyythmias (anaemia, thyrotoxicosis); conditions associated with A Fib (hypertension, heart failure, CAD, valvular disease, diabetes, obesity, sleep apnoea, alcohol misuse)
Drug history	
Social history/mental health	Excess alcohol, caffeine, illicit drugs (amphetamine, cocaine); worry/anxiety/mood, insomnia, smoking
Family History	Any sudden cardiac death, especially <40y

EXAMINATION

check pulse carefully – rate, rhythm, character; BP – sitting and standing, pallor, heart position, heaves/thrills/murmurs, any sign of heart failure, signs of thyroid disease,

Red flags!

- Palpitations during exercise
- Palpitations with syncope or pre-syncope
- FH sudden cardiac death
- 2nd or 3rd degree heart block on ECG

INVESTIGATIONS

Bloods - CBC (anaemia, infection), creatinine, Na, K, TSH
ECG - Look for AFib or flutter; 2nd or 3rd degree heart block; MI; LVH; LBBB; abnormal T waves or ST segments; pre-excitation – WPW pattern of a slow rise in the intial portion of the QRS (delta wave); abnormal QTc interval

Discuss with consultant if:

- Any red flag symptoms
- Other ECG abnormalities
- Associated symptoms such as chest pain or dizziness
- History or recurrent sustained tachyarrythmia
- Clear history of SVT
- Referral to cardiologist being considered

Serious cardiac pathology (or suspicion of)
Discuss with consultant for **admission or urgent cardiology referral**
Driving advice – should not be driving

Ongoing concern and need for ambulatory monitoring - refer to cardiologist.
Driving advice – should not be driving

Underlying treatable cause found e.g. AFib, hyperthyroidism, anaemia, anxiety – **see relevant guidelines** and continue management

Low risk features – usually extra-systoles or sinus tachycardias

- Isolated palpitations, not provoked by exercise and not associated with symtpoms such as dizziness, syncope, persitent breathlessness, chest pain
- No history or signs of structural cardia disease, heart failure, hypertension
- No FH sudden cardiac death
- Normal ECG

No further investigations required; reassure

References BMJ 2016;352:h5649; Red Whale GP Update Handbook: Atrial Fibrillation and flutter