HISTORY: PALPITATIONS

Palpitations are the perception of a rapid or abnormal heart beat. They are a common presentation and may occur in both older co-morbid patients, and those who are otherwise fit and well. The underlying cause can be difficult to identify and range from the benign to the potentially life threatening. A careful history is required to determine risk and to plan further investigations and management.

Presenting complaint: can vary but common complaints include 'heart racing', 'fast heart beat', 'irregular heart beat', 'becoming more aware of the heart beating', 'flutter in the chest'

OSCE-Aid Tips

Remember that while many arrhythmias may present with 'palpitations', patients can be in an abnormal rhythm and be completely asymptomatic. This is why it is vital to compliment any history with a thorough physical examination!

History of Presenting Complaint:

- Ask the patient to describe what they mean by palpitations: If they are having palpitations they should describe an **abnormal sensation of the heart beating** in the chest
- Is the beat fast or slow? Regular or irregular? Ask the patient to **tap out** the rhythm of their heart.
- Often if they state that the heart is 'missing a beat' this can mean they are having multiple ventricular ectopics (which are actually an extra beat, usually followed by a short pause, followed by the resumption of normal rhythm).
- How long do the palpitations last? Do they occur at a particular time, or on exertion?
- Associated symptoms: any sweating, breathlessness, chest pain, fatigue, or ankle swelling? Have there been any episodes of fainting ('syncope') or near-fainting/dizziness ('pre-syncope'). These symptoms can suggest a more sinister underlying diagnosis or mean that more urgent assessment is required.
- Relationship to exercise (coming on with exercise is much more concerning. Often more benign diagnoses such as ventricular ectopics, which can occur in fit and well people, can come on at rest when the heart rate is low).
- Are they otherwise well at the moment (infections can precipitate episodes of atrial fibrillation in people who are otherwise normally in sinus rhythm).
- Are they are having palpitations right now – if so are they having any of the above associated symptoms; this may change the focus of the station to one with more of an ABCDE approach!

Past Medical History:

- Any history of known arrhythmias; patient may have atrial fibrillation and be having palpitations due to going into fast AF
- History of cardiac disease:
    - Previous MI raises concern for ventricular tachycardia, atrial fibrillation and heart block.
- Hypertension and valvular heart disease (especially mitral disease): increased risk of atrial fibrillation

- Caffeine and alcohol consumption can lower the threshold for the heart to go into abnormal rhythms such as SVTs and AF/flutter).
- Smoking: nicotine is a stimulant and can precipitate AF.
- Consider illicit drug use, especially cocaine, MDMA, and amphetamines.
- History of mental illness: patients who suffer from anxiety often get palpitations.
- Systemic disease: hyperthyroidism, anaemia, pregnancy.

Drug History:

- QT interval prolonging drugs (e.g. several types of antipsychotics, antidepressants and antihistamines as well as some drugs which are used for arrhythmia management, such as sotalol or amiodarone)
- Anticoagulants (warfarin, direct oral anticoagulants): useful to know down the line if AF is suspected, as many patients require anticoagulation to reduce risk of stroke from AF (as per their CHADSVASC score)
- Beta-blockers: useful in rate control for atrial fibrillation and in reducing risk in patients with non-sustained ventricular tachycardia.
- Beta-2 agonists (e.g. salbutamol): can precipitate tachycardia.

Family History:

- Is there any family history of sudden death (congential e.g. long QT syndrome)?

Social history:

- Occupation: if episodes of collapse this is particularly relevant in people who drive heavy goods vehicles or operate heavy machinery!
- Always ask about smoking and alcohol if you haven't already.
- Stressors/general anxiety: explore current mental state: is there anything causing major stress? Did this coincide with the onset of palpitations? Are they an anxious person? While it is always vital to perform a full assessment, many patients can experience palpitations associated with stress and anxiety and actually have no abnormalities in their cardiac rhythm. This may in fact be the entire focus of the station, and the patient may have no underlying cardiac problem!

Summary:

A thorough initial history is essential to determine further management of patients with palpitations. However, is it difficult to be certain of the underlying cause without further assessment including a full clinical examination.

Further investigations including ECGs, 24-hour tape and echocardiography +/- referral to secondary care may be warranted. The need and urgency for this is determined through identification of red flag features.

Red Flags:

Palpitations occurring at the time of the consultation with a fast rate or with haemodynamic compromise or symptoms including chest pain, breathlessness, syncope or pre-syncope should prompt immediate assessment with 12 lead ECG and referral for hospital admission.

Symptoms suggesting the need for further assessment and investigation include:

- History of chest pain or breathlessness occurring with palpitations in the past
- History of collapse/pre-syncope
- History of sudden cardiac death in relatives <40
- Sinus ECG showing pre-excitation or prolonged QTc.
- History of cardiac disease (IHD, valvular, congential heart disease)
- Suspicion of atrial fibrillation