

Medicine for Managers

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Palpitations

Do you remember when you were young; perhaps in the first flush of teenage years? Your eyes fell on the Venus or Adonis that would be your first true love. Suddenly your heart felt as though it would jump out of your chest. That was probably your first experience of palpitations. I hope they were worthwhile! Indeed perhaps your thoughts are returning to that special moment right now!

Palpitations are in fact simply an awareness of one's own heart beat. They may be noticeable because they are rapid or forceful, as when exercising vigorously, or the beat may be irregular in some way. Sometimes the beat is less forceful and more like a fluttering sensation.

Fortunately the large majority of palpitations are harmless. Fear, excitement and passion can all generate palpitations as a result of release of hormones such as adrenaline.

So can a number of other agents such as drinking large amounts of coffee, tea or the caffeine containing energy drinks, alcohol, smoking spicy foods and the use of drugs such as cocaine or amphetamines.

A number of cardiac anomalies can also be responsible. The heart may become noticeable if it is beating at more than 100 beats a minute (*tachycardia*), if it is beating irregularly (*atrial fibrillation*) or if the heart is producing extra beats (*extrasystoles*) which usually occur when

there is more than one point of origin of the beat mechanism. Panic attacks are a common cause of palpitations, in circumstances where an individual is frightened or anxious. The

palpitations may be accompanied by shaking, nausea, and sweating. In such circumstances the patient may need help to control the symptoms and it may be in the form of mental health support or medication to moderate the heartbeat.

Some drugs can, however, induce palpitations and these include some drugs used in the treatment of asthma (especially the more old-fashioned drugs given in tablet form) or for the treatment of thyroid disorders.

Other reasons for palpitations include a high temperature, dehydration, anaemia, low blood sugar and, occasionally low blood pressure.

A person presenting at the GP surgery with palpitations will be asked questions. Firstly the doctor will try to establish what the patient

actually means by palpitations. They are by definition an awareness of the heart beat, not being felt in any other part of the body.

The doctor will want to know how often they happen, how long each attack lasts, what aggravates them and what relieves them. It will be important to find out whether the palpitations are regular or irregular, fast or slow. Other symptoms, including chest pain, will be important to identify.

The history will also include questions about caffeine consumption in coffee, Coca Cola or Red Bull and alcohol use. Smoking is important as is illicit drug usage. Palpitations may also be apparent in the obese and patients with complications such as heart failure.

After a general physical examination to exclude obvious possible causes such as anaemia, blood pressure problems, thyroid disease and evidence of clinical heart abnormalities, the first port of call will be the electrocardiogram (ECG).

This may identify some types of cardiac pathology, such as extra beats. Commonly of course the ECG is normal because the episodes are intermittent or induced by particular circumstances. It may be necessary to have a 24-hour ECG monitor fitted.

This will monitor all the heart activity for a day and will pick up any episodes of abnormal beat that occur during that time. If the palpitations are brought on or affected by exercise, then it may be necessary to carry out the ECG with the person on a treadmill to induce the cardiac changes. It is important to note whether the

palpitations are caused by, or induce chest pain, breathlessness or feelings of faintness and imminent collapse.

If the ECG shows changes which the patient recognises as palpitations, they may be caused by a variety of different causes. They may be the result of disturbances in the way in which the rhythm is generated in the heart, or damage to the heart itself (e.g. disease of the heart valves) may be responsible.

Some types of abnormal rhythm are serious and may need the patient to be admitted for more sophisticated tests and treatment to eliminate or control the problem.

The sudden onset of a serious abnormality in the heart beat (a dysrhythm) can be serious or, on occasion, fatal.

For most patients, however, the heart will be found to be in robust good health. There may then be advice on drink consumption, smoking, alcohol or illicit drug usage.

There may be the need to investigate and treat other medical problems such as anaemia, diabetes or thyroid disease which result in cardiac anomalies. If the palpitations are born out of panic type attacks, there may be a need for anxiolytic drugs or for cognitive behavioural therapy (CBT).

In some cases a group of drugs called the beta-blockers are very valuable. They are used for palpitations of many sorts, including those in people who panic before exams or things like driving tests. The medication blocks the actions

of adrenaline and thereby reduces the fight, flight or fright mechanism.

The drug is much beloved of actors, musicians, public speakers and dancers to avoid performance anxiety. They are also very useful for golfers and, particularly, snooker players to keep them calmer and eliminate tremors.

So there we are, palpitations, often minor, sometimes serious. The first time your heart pounded as the perfect man or woman looked excitedly into your eyes, little did you realise that the palpitations together with the tingling, the shaking, the sweating and the breathlessness would matter so much for so many years. I hope that, if you have a person in your life, the tingling and the sweating are still there even if, perhaps, the palpitations are now controlled by your GP.

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