Ectopic Heart Beats

What are ectopic beats?

Normal heart beats come from the pacemaker of the heart, known as the sinoatrial node, which is situated in the top right hand chamber (the right atrium). Sometimes beats can be fired from elsewhere and these are known as “ectopic beats”. The word “ectopic” just means “wrong place” – for example “ectopic pregnancy” means a pregnancy outside the womb. An ectopic beat is an early (“premature”) or “extra” beat which can come from either one of the upper chambers of the heart (the atria) or one of the lower chambers (the ventricles).

These beats occur before the normal beat of the heart can form. Thus there is more opportunity for them to occur when the heart is going slower, such as during the night with sleep or when relaxing. Ectopic beats are very common and in most people with no other heart disease they are harmless. However, they can be troublesome due to the sensation that they sometimes produce. Most people who have ectopics are completely unaware of them – our awareness of what goes on in our bodies is extremely variable. They do not usually indicate any problems with the heart.

Any awareness of the heartbeat is known as “palpitation”. An ectopic beat can be felt as an “extra” beat in the rhythm of the heart or as a “thud” following a short pause in the rhythm of the heart. In this second case the additional beat of the heart actually has occurred in the pause and the following thud is the heart catching up. The heart is not at risk of “stopping”. Although such symptoms can be unpleasant, ectopics will not cause any damage to your heart unless extremely frequent (e.g. every 2nd beat throughout the day and night).

Diagnosis

In general a health professional can make the diagnosis of an ectopic beat from the story that you give, but an electrical heart tracing is required (Electrocardiogram or ECG, or a monitor) to confirm this diagnosis. If you are not having the ectopics all that regularly it may not be possible to catch them on an ECG so a portable monitor may be required. The ECG demonstrates the electrical activity of the normal heart beat, with ectopic beats having a different appearance or timing. In patients with frequent symptoms a 24 hour ECG will sometimes be undertaken to clarify the pattern and frequency of the ectopic beats and their relation to symptoms.

Although in most individuals ectopic beats are not a cause for concern, they can occasionally indicate underlying structural heart disease and in this scenario may be of greater significance. Further cardiological assessment may be advised. However, it should be emphasised that in most individuals ectopics do not indicate any problems with the heart.

Treatment

The vast majority of people do not require specific treatment for ectopics. If they do cause unpleasant symptoms there are things that can be done to try to limit them.

In some people, eliminating alcohol, caffeine, stress and tiredness may help. Cold medicines, available without prescription, sometimes contain drugs such as decongestants that can stimulate the heart and these are probably best avoided as they may increase your symptoms.

If symptoms are persistent and uncomfortable medical therapies can be tried. Generally the doctor would initially use a simple medication such as a beta-blocker (for example metoprolol) or calcium channel blocker (for example verapamil). There are other treatments that may be effective in reducing your symptoms but in an otherwise healthy individual the risks of such treatment can outweigh the benefits.