

## Ectopic heartbeats

This factsheet provides information for people who experience ectopic heartbeats. It gives a description of this condition, how to recognise it, and how it can be alleviated if problematic.

An ectopic beat is an additional beat of the heart which can come from either the upper chamber of the heart (the atrium) or the lower chamber (the ventricle). They are therefore described as premature atrial contractions (PACs) or premature ventricular contractions (PVCs). The beat occurs just before the normal heartbeat. Ectopics tend to occur when the heart rate is slower, such as when we are relaxing in the evening or sleeping at night.

Ectopics can either 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 example the additional beat of the heart has occurred in the pause, and the following thud is the heart catching up.

Ectopic beats are common, and in most people with no other known heart condition they are harmless. They carry no increased stroke risk even in patients with a damaged heart, such as those with heart failure or runs of supraventricular tachycardia (SVT).

Although the symptoms necessarily can be unpleasant or cause anxiety, they do not indicate any problems with the heart, and the extra beats will not usually cause any damage.

Normally a clinician will diagnose an ectopic beat from what you have told them. A heart tracing electrocardiogram (ECG) will confirm this diagnosis. Any ectopic beats will appear as a different pattern on the visual trace. If the ectopics are less frequent, it may not be possible to catch them on an ECG, so a portable monitor may be more likely to capture them.

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 ectopic beats are not a cause for concern in most

individuals, in those with structural heart disease they may be of greater significance, and further cardiological assessment may be advised.

Frequent atrial ectopics together with a significant CHA<sub>2</sub>DS<sub>2</sub>-VASc (AF-Related stroke risk) score may be an indication of underlying atrial fibrillation (AF). AF is a common irregular heart rhythm (an arrhythmia) which carries a significant increased AF-Related stroke risk. Some schools of thought consider that ectopic episodes or palpitations lasting more than 30 seconds actually are AF, and should therefore be assessed for AF-Related stroke risk.

If a person suffering with ectopic beats is otherwise fit and healthy, all that is usually needed is reassurance and advice, such as cutting down on anything that may be acting as a stimulant, for example alcohol or caffeine. Stress can also trigger ectopic beats. Off-the-shelf cold and flu medicines sometimes contain decongestants and other drugs that can stimulate the heart, and these are probably best avoided.

If symptoms are persistent and uncomfortable, medical therapies may be appropriate. Generally, your doctor would initially use a medication such as a beta blocker (e.g. bisoprolol). In patients with asthma or bronchitis, such medicines cannot be used, and an alternative such as a calcium channel blocker (e.g. diltiazem) may be considered. In some otherwise healthy individual, other drugs may reduce the symptoms effectively, but their risks may outweigh the benefits.

In summary, ectopic beats are nearly always harmless and do not indicate any problems with the heart. However, it is always best to see your doctor for evaluation and investigation.

**Acknowledgements:** AF Association would like to thank all those who helped in the development and review of this publication. In particular, thanks are given to Dr Matt Fay, Mrs Jayne Mudd and Dr Charlotte D'Souza.