Implantable cardioverter defibrillators and cardiac resynchronisation therapy for arrhythmias and heart failure

Information for the public
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What has NICE said?

Implantable cardioverter defibrillators are recommended as a possible treatment for people who have had a serious ventricular arrhythmia, who have an inherited heart condition linked to a high risk of sudden death, or who have had surgery to repair congenital heart disease.

Implantable cardioverter defibrillators, and cardiac resynchronisation therapy with defibrillation or pacing, are recommended as possible treatments for certain people with heart failure because of left ventricular dysfunction (see the guidance for more information).
What does this mean for me?

If you have an arrhythmia or heart failure, and your doctor thinks that an implantable cardioverter defibrillator or cardiac resynchronisation therapy with defibrillation or pacing is the right treatment, you should be able to have the treatment on the NHS.

Why has NICE said this?

NICE recommended implantable cardioverter defibrillators and cardiac resynchronisation therapy because the benefits to patients justify their costs.

NICE looks at how well treatments work in relation to how much they cost compared with other treatments available on the NHS.

The conditions

An arrhythmia is a variation in the heartbeat. It can become faster or slower than usual, or become irregular. Sometimes, an arrhythmia can stop the heart from pumping enough blood around the body, including to the brain and heart muscle. This can happen very suddenly and unexpectedly, leading to sudden death, and is usually caused by ‘fast’ arrhythmias in the ventricles (the lower chambers of the heart). Congenital heart disease is a heart problem that someone has been born with.

Heart failure can be caused by several things that make the heart a less efficient pump. When the left ventricle of the heart pumps less blood to the body because of weak contractions, it is called left ventricular dysfunction.

The treatments

An implantable cardioverter defibrillator is a small device that is put into the upper chest below the left shoulder. Leads from the device go into the heart to:

- control the rate of the heartbeat
- continually sense for an irregular heartbeat
• deliver a small electric shock to return the heartbeat to its normal rhythm (defibrillate) if necessary.

Cardiac resynchronisation therapy brings the pumping action of the heart chambers back in time with each other, to make the heart more efficient. A pacing device is put into the chest and attached to the heart chambers using three tiny leads. The device can also have a defibrillator added to it.

NHS Choices ([www.nhs.uk](http://www.nhs.uk)) may be a good place to find out more.

**Sources of advice and support**

- Action Heart, 01384 292233, [www.actionheart.com](http://www.actionheart.com)
- Arrhythmia Alliance, 01789 450 787, [www.arrhythmiaalliance.org.uk](http://www.arrhythmiaalliance.org.uk)
- British Heart Foundation, 0300 330 3311, [www.heartuk.org.uk](http://www.heartuk.org.uk)
- British Cardiac Patients Association, 01223 845845, [www.BCPA.co.uk](http://www.BCPA.co.uk)
- SADS UK, 01277 811215, [www.sadsuk.org](http://www.sadsuk.org)

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