

## **Pacemaker**

### **What is a pacemaker?**

An artificial pacemaker is a small device that is fitted inside the chest to help regulate the heartbeat.

### **Who can benefit from having a pacemaker fitted?**

We all have a natural pacemaker – the sinoatrial node – that regulates the heartbeat by sending an electrical signal through the heart. Sometimes individuals may have an irregular heart rhythm or one that beats too slow or fast (referred to as arrhythmias). In this case, an artificial pacemaker will need to be fitted to regulate the heartbeat. A patient may also need a pacemaker if there is a block in the heart's electrical pathway. An artificial pacemaker can help promote a more active lifestyle for those who suffer from arrhythmias.

### **Procedure**

The pacemaker will be fitted while you are under a local anesthetic. A needle is placed into a vein close to your shoulder, and is used to thread wires through the vein and into the heart. Once the wires have been placed in the heart, a small cut is made into the chest and the pacemaker is fitted under the skin and attached to the wires. The incision is then closed using sutures. This procedure is called the endocardial approach; however sometimes a more surgical procedure called the epicardial approach can be used, but is less common in adults.

### **Recovery period**

Recovery from the pacemaker will involve an overnight stay in hospital so that your heartbeat can be monitored. You will need to arrange for someone to pick you up, as you are not allowed to drive for around a week following the pacemaker being fitted. Painkillers can be taken to alleviate any pain, and you may be aware of some bruising and swelling. You may need to avoid doing any strenuous exercise and coming into contact with certain electrical devices, but your doctor will advise you on this.

### **Risks**

Infection, discharge from the wound, nerve damage, movement of pacemaker leads, collapsed lung, bleeding, blood vessel damage, reaction to anesthetic.