STARS
Syncope Trust And Reflex anoxic Seizures

Arrhythmia Alliance

AFAssociation

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Insertable Cardiac Monitor

Working together to improve the diagnosis, treatment and quality of life for all those affected by arrhythmias

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Registered Charity No. 1107496

Glossary

Insertable Cardiac Monitor (ICM) (previously known as Implantable loop recorder) A small thin device inserted under the skin to record your heart's activity

Cardiac Physiologist/Scientist A healthcare professional skilled in interpreting and providing information on your heart rhythm

Cardiology Department A hospital department where investigations for your heart take place

Important Information

This booklet is intended for use by people who have, or are about to have, an Insertable Cardiac Monitor and for their family/carers. The information comes from research and previous patients' experiences and gives a brief explanation of how the Insertable Cardiac Monitor works. Please note : DO NOT use an AliveCor Kardia Mobile with a pacemaker, ICD, S-ICD, CRT or similar implantable device.

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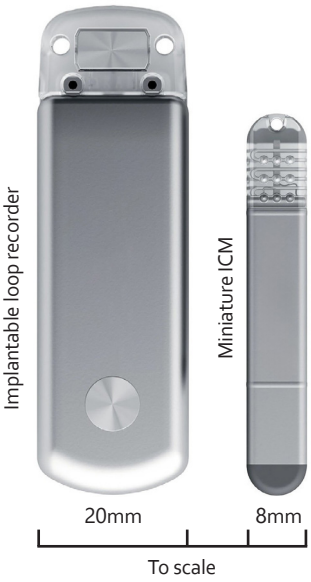
What is an Insertable Cardiac Monitor (ICM)?

An Insertable Cardiac Monitor (ICM) is a small thin device that is inserted under the skin to record the activity of your heart.

The ICM monitors and records your heart's electrical activity in order to identify any changes to the heart rhythm. You may be experiencing symptoms that indicate you have an abnormal heart rhythm such as palpitations, dizziness, or blackouts/ fainting episodes (loss of consciousness).

The ICM can remain in place for up to three years. However, the device may be removed sooner depending on when you experience symptoms, such as a fainting spell. To capture and record an episode, you are required to place a hand-held activator over the ICM and press a button in order for the symptom to be recorded. Newer devices use a smartphone app instead of an activator. In this case, you only need to press the "symptom" button on the app, without having to bring your smartphone near the ICM.



However, if recovery time is needed first then activate as near to the event as possible. If required a family member or friend can place the activator over the device to save the information or press the button on the smartphone app. It is important to carry the activator with you so that any episode can be recorded. A recording will then be stored for your cardiac physiologist to analyse to determine whether an abnormal heart rhythm caused the symptoms.

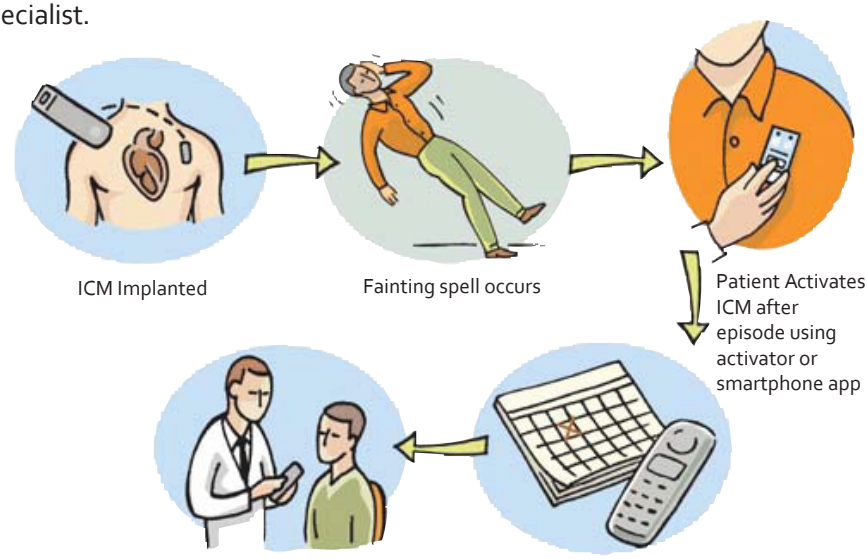
Although the device is supplied with a separate 'activator' similar to the older, larger device to record an episode, this is not essential as the ICM is remotely monitored, wirelessly, through a receiver in your house. Some devices can be monitored via a smartphone. Any unusual heart activity will be transmitted via a signal to a secure system which will alert the heart rhythm specialist. You would then be contacted if necessary. Inevitably this will provide more peace of mind for a patient.

Why has my doctor advised an ICM?

If a doctor is unable to diagnose the cause of your symptoms with simple recording methods such as an ECG or a 24 hour monitor, they may consider an implantable cardiac monitor (ICM).

Traditionally doctors would have implanted an insertable loop recorder (ILR) (which is the size of a USB stick) under the skin on the left side of a patient's chest in order to capture a recording of the heart rate and rhythm at the time of an episode.

The device records on a continuous loop for up to three years and can be used to document any episodes, which would then be assessed by a heart rhythm specialist.



How is the ICM implanted?

As this miniature monitor is so much smaller and easier to implant, it is intended that the procedure could be performed in a treatment room as an outpatient, rather than a theatre setting. Implantation of the device requires an incision of less than 1cm which can then be closed very simply with medical adhesive, steri-strips or one suture. The procedure will only take about ten minutes and is done under local anaesthetic (risks associated with this include bleeding, bruising, and infection).

Hopefully this will reduce the waiting lists for this diagnostic device to be fitted and in some cases the procedure could be undertaken when you first attend the clinic, saving delay in reaching a diagnosis and the inconvenience of repeat visits.

The insertion of an ICM can be performed as a day case procedure.

What happens after the ICM is fitted?

A cardiac physiologist/scientist will program the ICM to required settings either at the implant time or just after, this only takes a few minutes. Before you are discharged home the physiologist will explain how and when to use your activator or smartphone app. You will also be provided with an information booklet and an ID card. The physiologist will answer any questions you may have.

Going home

If you experience any difficulties with your ICM, contact the cardiac physiology department where your device was implanted. You will be given a contact number before you are discharged from hospital.

Using an ICM

To capture and record an episode, you are required to place a hand-held activator over the ICM or press a button on your smartphone app. The instructions for this will be clear on the app. When in place, press the button in order for the device to save the information. This should be done whilst experiencing symptoms or as near to the event as possible. The cardiac physiology department will be able to access your ICM records remotely and see what rhythm was occurring during your symptom. They will call you for advice or reassurance. Otherwise, you may contact the department and ask for advice yourself.

Removing your ICM

Once a heart rhythm disturbance has been captured and the cause determined through this monitor, the device can be removed with another quick, simple procedure. Further investigations and treatments can then be undertaken.

It is safe to use an automated external defibrillator (AED) on someone who has a pacemaker or implantable cardioverter defibrillator (ICD). It is important not to place the pads in contact with, or directly over the device. The pads are usually placed on the upper right of the chest and on the left side of the rib cage, so a device should not get in the way. If someone has an implanted device, you will notice a scar and a bump. Place the pad to the side of the device (about 3cm).

The shock produced could affect the functioning of the pacemaker or device, however the benefits of using the AED to save someone's life outweigh this potential risk. If you receive CPR or defibrillation, you should have your device checked afterwards to ensure the settings are still accurate. If you have any questions or concerns, please contact your cardiologist.

Notes

This booklet has been written to support those diagnosed with an arrhythmia and their carers, who struggle to find information on this condition.
Without donations and fundraising, we would not be able to provide support through our award-winning resources and helpline.

Please donate to support our vital work at
www.heartrhythmalliance.org/aa/uk/get-involved/donate

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"My family and myself were initially anxious about having my ICM, this booklet has given me a step-by-step guide that we are able to share as a family"

Peter, Ipswich

To view our patient resources, scan the QR code below:

Please remember that this publication provides general guidelines only. Individuals should always discuss their condition with a healthcare professional. If you would like further information or would like to provide feedback, please contact us.

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If you would like further information or would like to provide feedback please contact Arrhythmia Alliance, AF Association or STARS.