

WHAT HAPPENS IF THE ICD KEEPS ON DELIVERING SHOCKS?

On rare occasions the ICD may be *triggered* by an external source which is nothing to do with the patient's heart rhythm problem such as external noise or a lead problem. It may also be triggered by a rhythm that is not life threatening but comes from another source in the heart. If this happens the ICD needs to be rapidly disabled using a magnet.

HOW DOES A MAGNET WORK?

An ICD can be temporarily switched off by placing a magnet directly over it. The magnet needs to be kept in place until help has been found. This will only be a temporary measure and will stop the ICD delivering more shocks

Some patients will have been given a **MAGNET** by their ICD centre for this purpose and placing it over the ICD will stop it delivering any more shocks. This will only be a temporary measure and will only be effective while the magnet is in place.

Once this has been done help will be needed to find out why the ICD is shocking so the patient should be taken either to their ICD centre if possible or to the local hospital that will then arrange investigation and transfer if necessary.

If the patient does not have a magnet then call an ambulance as they will need to get to their local A & E immediately for the ICD to be switched off.

ONCE AGAIN MAKE SURE THAT WHOEVER IS CALLED IN AN EMERGENCY IS GIVEN ALL THE RELEVANT ICD INFORMATION THAT THE PATIENT HAS AVAILABLE.

EFFECT OF SHOCKS ON ANYONE TOUCHING THE PATIENT

Anyone touching the patient whilst the ICD is delivering shocks will feel at the most a physical jump. The amount of electrical energy that is transmitted to the body surface is minute and will not cause any harm whatsoever.

Very occasionally partners or people touching patients receiving shocks have felt a slight tingle. This is not harmful.



Living with an ICD? All you need to know about ...

EMERGENCIES



Patient Information Leaflet
for People Living with an
Internal Cardioverter Defibrillator (ICD)

*If you would like to meet other people
living with an ICD, then why not come
along to the ICD Club.*

*It is based in West Surrey but is open to
anyone living in Surrey*

Contact Ian Clement on
01932 722530 or email
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Royal Surrey County Hospital
NHS Foundation Trust

Ashford and St. Peter's Hospitals
NHS Trust

Epsom and St. Helier
University Hospitals
NHS Trust

Frimley Park Hospital
NHS Foundation Trust

Surrey and Sussex
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Adapted for use in Surrey Nov 2010 with
permission from St. George's Hospital NHS Trust

HOW DOES A DEFIBRILLATOR WORK?

The implanted defibrillator (ICD) acts as a constant heart monitor through the leads that are attached to the heart and which feed signals back to the box.

The ICD is set to detect heart high rates above a certain level. This level will be different from person to person and will depend on the patient's underlying problem. The level may vary from 130 beats per minute (bpm) to 220 bpm for example.

If the monitored heart rhythm starts going too fast then the ICD switches to full alert. If the rhythm stays above the set detection rate for a given time then the box starts to deliver whatever treatment is programmed.

If the patient's rhythm reverts to normal on its own then the ICD will switch back to monitor.

The treatment may be delivery of fast pacing stimuli or low or high level shocks. It will continue to treat until either the heart rhythm goes back to normal or until all treatments have been delivered.

The number of treatments depends on the type of box but may be up to 7 shock therapies in a row.

WHAT HAPPENS TO THE PATIENT DURING TREATMENT?

A patients' response will vary depending on what therapy is being used. Many patients are unaware of pacing therapies but all patients will be aware of shock treatment.

At the start of a fast heart rhythm patients may feel palpitations and start to feel dizzy if their blood pressure drops with the increased heart rate.

Some patients are not aware of their rhythm changing or any symptoms at all.

Some patients may actually lose consciousness. If there is time then it is best to sit down wherever you are and wait for either the rhythm or palpitations to stop or for treatment to be delivered.

The effect of shock treatment is to cause a quite violent twitching or jumping of the body. This is unpleasant and the shock is felt in different ways by different patients.

WHAT HAPPENS IF THE ICD DOES NOT WORK?

1. If the ICD delivers shocks but the patient faints, take their pulse immediately. If there is no pulse then CPR (emergency heart massage and mouth-to-mouth breathing) should be started and an emergency ambulance called.
2. If CPR cannot be started then put the patient in the most comfortable recovery position and get help.
3. If the ICD has delivered a shock and the pulse is still rapid, it will shock again until it has got to the end of its therapies. If the pulse is still rapid then help should be called. Many patients will not lose consciousness even with a rapid pulse so there will be plenty of time to get them to the local hospital A&E department.
4. Make sure that the paramedics who are called and the local hospital department are given all the information that the patient has available about their condition and ICD.

TRY NOT TO PANIC AND TRY TO REMAIN CALM FOR THE SAKE OF THE PATIENT.

WHAT NEEDS TO BE DONE AFTER A SHOCK?

When a patient has a shock from their ICD it is important to try and stay as calm as possible.

Many patients may feel perfectly alright after a shock and can carry on with whatever they were doing beforehand. If this is the case then there is no need to treat the situation as an emergency and call an ambulance. This will only result in more trauma and upset and remember that the shock is the point of having the ICD in the first place.

If the patient feels all right at the time of the treatment but is not sure of the best course of action then contact their ICD centre for advice.

Do not call an ambulance if the patient **does** feel all right. It is up to them to decide what they need and what the best is for them.

If the patient feels very unwell before, during or after treatment from the ICD or loses consciousness then a doctor or ambulance should be called **IMMEDIATELY** and if loss of consciousness persists after treatment then CPR should be started immediately.

ICD patients who have had treatments from their ICD regularly will often be aware of their heart rhythm changing and will be able to prepare themselves for whatever treatment is to be delivered.

However, many patients receiving first time treatment from their ICD will be very upset by their first shock and will need help and support.

They should contact their ICD centre as soon as they can and arrangements will be made to see the patient immediately – or as soon as is feasibly possible to read the ICD and check exactly what has happened. This will help to provide reassurance and the support that is needed.