



PATIENT INFORMATION

**Patients having radiotherapy  
who also have an implantable  
electronic device e.g. pacemaker**





**Worcestershire Oncology Centre**  
Improving cancer services in Worcestershire

**This information is for patients with a cardiac implantable electronic device (CIED), such as a pacemaker, who are undergoing radiotherapy.**

Pacemakers are the most common CIED. The way CIEDs work can be affected by the radiotherapy treatment machine, the linear accelerator (linac).

Various studies have been performed but the exact risk to these devices is difficult to quantify. The likelihood of any adverse effects can depend on the device's age, design and other things such as the treatment dose, distance from radiation field and the beam energy used.

We liaise with the cardiology team but generally speaking, the likelihood of temporary or permanent damage to these devices is very low as long as they are kept outside the radiation field. Your device will receive special consideration in the treatment planning process if it is close to the treatment area. We will also take some precautionary measures to ensure your safety at all times during treatment.

### **What can I expect during treatment?**

Before treatment starts, you may be asked to attend for a device check at the Clinical Investigations unit, usually just after you attend for your treatment planning/CT scan appointment.

You may be asked to attend the Clinical Investigations unit for a device check straight after your treatment on the first 3 days (Monday to Friday). You will attend daily or weekly thereafter depending on their recommendations.

**If your device is an Implantable Cardioverter Defibrillator (ICD)**, you will have your defibrillator safely deactivated in the treatment room by a Specialist Cardiac technician. You will be monitored closely whilst the radiographers are getting you in position on the couch for your radiotherapy treatment and during treatment. Once the treatment is complete, the defibrillator will be reactivated and the ICD will have its function checked, meaning you won't need a separate visit to Clinical Investigations unit. This will usually happen for each radiotherapy treatment.

If your device is likely to be in the treatment field, then your cardiologist will be consulted and there may be a need to move the device if possible.

**Useful telephone numbers:**

**Worcestershire Oncology Centre–**

Monday to Friday 8.45am – 5pm

Radiotherapy reception: 01905 761400

For queries concerning appointments, parking and ambulance transport

**Cardiopulmonary department (Clinical Investigations): 01905 760690**

Monday to Friday 9am – 5pm

**If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.**

### **Patient Experience**

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

### **Feedback**

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

### **Patient Advice and Liaison Service (PALS)**

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

### **How to contact PALS:**

**Telephone Patient Services: 0300 123 1732 or via email at: [wah-tr.PET@nhs.net](mailto:wah-tr.PET@nhs.net)**

### **Opening times:**

The PALS telephone lines are open Monday to Thursday from 8.30am to 4.30pm and Friday: 8.30am to 4.00pm. Please be aware that a voicemail service is in use at busy times, but messages will be returned as quickly as possible.

If you are unable to understand this leaflet, please communicate with a member of staff.