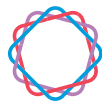




YOUR GUIDE TO

Premature Ventricular Complex (PVC) / Ventricular Tachycardia (VT) Ablation



IntraCare

Electrophysiology



IntraCare's electrophysiology suite

Contents

About this procedure	1
Before your procedure	3
Your procedure	5
After your procedure	6
How to find us	8

About this procedure

This guide provides information about a premature ventricular complex (PVC) or ventricular tachycardia (VT) ablation procedure. It includes details about what is involved, how to prepare and what to expect during and after the procedure. Please use this in addition to information from your doctor and nurse.

PVC and VT ablations are performed in an electrophysiology (EP) suite at IntraCare in Epsom. Your cardiologist will be assisted by our team of nurses and other highly skilled personnel.

Both IntraCare and Allevia Hospital will be involved with your care for this procedure. Allevia Hospital are responsible for your admission, preparation and aftercare in the Cardiac Investigation Unit (CIU).

What is a PVC?

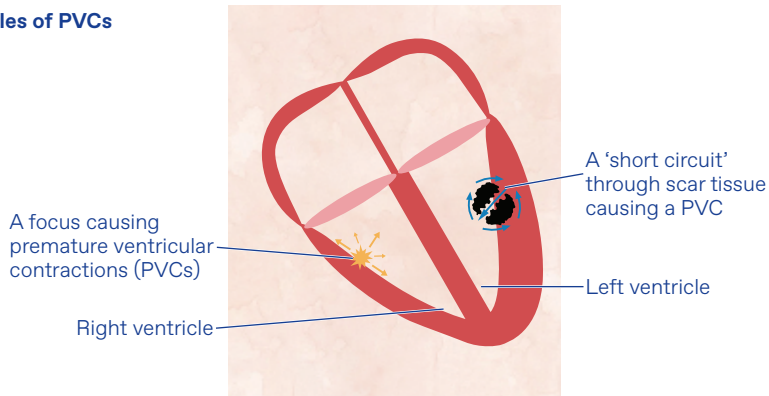
A premature ventricular complex or PVC (also referred to as ventricular ectopic) is a single abnormal heartbeat arising in the bottom pumping chamber (the ventricle) of the heart. If there are too many PVCs present, this can lead to poor ventricular pumping function and eventually, heart failure. PVC presence is usually diagnosed by wearing a 24-hour heart monitor (Holter) which counts the frequency of PVCs compared to normal heart beats. This is expressed as a percentage called the 'PVC burden'.

The goal of PVC ablation is to locate the source of the abnormal heartbeat in the ventricle and remove (ablate) this. Following ablation, a repeat 24 hour heart monitor (Holter) is done to confirm the PVC burden is reduced or even eliminated.



ECG of sinus rhythm. Arrow shows example of the PVC.

Examples of PVCs



What is ventricular tachycardia (VT)?

Ventricular tachycardia is a fast heart rhythm that arises from either the left or right ventricle, the two major pumping chambers of the heart. VT is a more serious rhythm problem because it often occurs in a setting of previous heart damage (e.g. a heart attack) and results in less blood being pumped to the brain and body.

Sometimes with VT, the heart is otherwise healthy, and the abnormal rhythm arises from a collection of irritable cells within the ventricle (focus).

Why do I need a PVC/VT ablation?

Brief episodes of ventricular tachycardia may present with no symptoms at all. However, for many people with VT, they may experience symptoms such as dizziness, shortness of breath, palpitations, or chest pain. Longer lasting or more serious episodes can cause loss of consciousness or cardiac arrest, which can be life threatening.

Frequent VT or PVCs, even if initially asymptomatic, can lead to poor ventricular pumping function (heart failure) and symptoms that can affect quality of life. If left untreated this can become life threatening.

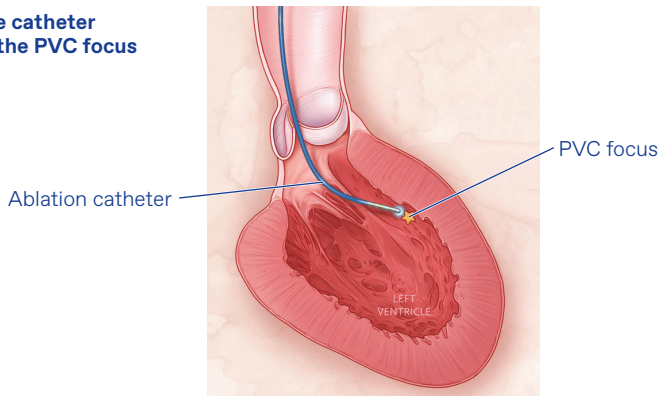
What is a PVC/VT ablation?

An electrode catheter is placed in the heart, and radio-frequency energy is used to cauterise the small area of irritable cells.

PVC/VT ablations target the area of heart tissue causing the abnormal beats within the ventricle. A specialised electrode catheter then cauterises the target area with a controlled focussed 'burn' of radiofrequency energy, about 2–3 mm wide.

A cluster of small ablation burns are made around the target site of the abnormal beats in a daisy like shape. This stops those cells from firing off and causing PVCs or VT.

Electrode catheter ablating the PVC focus



Before your procedure

Pre procedure phone call

A nurse from IntraCare will call you 24–48 hours prior to your procedure to discuss the following information:

- Your admission time.
- When you should stop eating and drinking.
- Medication instructions.
- Allergies (including medications, contrast dye, dressings/plasters and food).
- Answer any further questions.

Antiarrhythmic medication

If you are taking an antiarrhythmic medication e.g. flecainide, sotalol or amiodarone, you may need to withhold this 3–5 days prior to your procedure.

Anticoagulation (blood thinner)

If you are taking a blood thinner e.g. Dabigatran (Pradaxa), Rivaroxaban, Warfarin or Clexane, you may need to skip a dose on the morning of your procedure.

Warfarin

If you are currently taking Warfarin, please inform IntraCare via email or phone as soon as possible. Our nurses will review your INR levels and advise any medication changes if necessary.

Other regular medications

Please continue to take these unless advised otherwise by your cardiologist. If you are taking a diuretic or water pills (e.g. frusemide, spironolactone), you may need to withhold this on the morning of the procedure.

Reminders for the day of your procedure

- If you are on regular medication, please bring this with you in its original packaging.
- Please leave all your jewellery and valuables at home. You are welcome to bring your mobile phone in with you.
- We recommend wearing loose-fitting clothing and shoes that are easy to slip on/off.
- You are encouraged to bring a friend or a family member as a support person before and after your procedure.
- This is commonly a day stay procedure, but please bring an overnight bag with you in case you are required to stay overnight.
- The planned procedure time is an estimate only and may vary. We will keep you informed of any unexpected delays on the day.

Informed consent

As with any procedure, there are potential risks involved. Your cardiologist and anaesthetist will explain the procedure, discuss possible risks and answer any questions you may have. Your whānau or support person are welcome to be part of this discussion. You will then be asked to sign the consent form. This will occur either at an earlier appointment, or on the day of your procedure.

Your procedure

A PVC/VT ablation is usually performed under local anaesthetic and conscious sedation. The procedure takes 1–3 hours depending on the ablation target area.

Preparation

Once you are in the EP suite, the staff will perform a safety check-in to confirm your name, date of birth and the procedure you are having. A small intravenous (IV) line will be inserted into a vein in your arm for medication to be injected. We may need to remove hair with clippers at the access site for sterile preparation. Please avoid shaving the area yourself as this may cause minor abrasions to the skin, increasing the risk of infection.

Several adhesive patches, small and large will be placed on your back and chest for monitoring and 3D mapping if required. Other devices for monitoring blood pressure, heart rate and oxygen levels will be fitted to ensure your safety during the procedure. We will carefully position and tuck your arms at your sides to ensure that sterility and safety are maintained.

The procedure

PVC and VT ablations are usually performed under local anaesthetic. The femoral veins in the groin area provide the easiest venous access into the heart. The groin area will be prepared with an antiseptic solution.

You will be covered with a large sterile drape and the area at the top of the leg will be completely numbed with local anaesthetic. This will sting for about thirty seconds.

You may feel pressure, but you should not feel any pain for the duration of the procedure. If at any time you feel pain or are uncomfortable, please let your doctor know and more local anaesthetic or medication to help you relax can be given.

Small hollow tubes (sheaths) will be inserted into the femoral vein. Using X-ray and sometimes 3-dimensional (3D) mapping system guidance, electrode catheters are then advanced up into the heart via the sheaths in the vein. The mapping and ablation are then performed. It is normal and expected for you to experience a variety of sensations in the chest including palpitations, or thumping.

After ablation, a wait phase is observed. Here, we watch your ECG recording to ensure that the PVC is no longer firing. Further ablation can be performed if necessary. Once the procedure is complete, the catheters and sheaths are removed from the vein.

After your procedure

You will be transferred from IntraCare to CIU, where the Allevia Hospital team will look after you in your recovery. Depending on the type of ablation, you may be discharged on the same day of your procedure or the following morning. Prior to your discharge, the nurses will provide instructions on medication, procedure site care, and resuming your usual daily activities.

Recovery and discharge

- Following your procedure, it is important that you **do not drive for 48 hours**. Please ensure you have a family member or friend to drive you home from the hospital, as you may still be under the effects of anaesthesia or sedation.
- You will need to arrange someone to be at home with you on the day of your discharge and overnight to support you in your recovery.
- Due to the sedation, you may feel lethargic afterwards with reduced concentration. For this reason, for 24 hours after your procedure:
 - Do not do any activity requiring strength, concentration, or full alertness.
 - Do not make any legal decisions or sign legal documents.
- Due to the nature of ablation, it is common to experience some chest discomfort for a few days.
- For a few weeks after your ablation, you may experience occasional skipped heart beats or brief palpitations. These symptoms are common and will decrease with time.

Resuming activities

- You will be able to return to work within a week of having the procedure unless your job involves heavy lifting (>5kg).
- You can begin light exercise after 1 week.

Medication

Your cardiologist will discuss any medication changes with you, if necessary. If you have any questions regarding your medications after your procedure, please contact your cardiologist.

Follow up appointment

You will be seen in clinic at The Heart Group approximately 1–3 months following your PVC/VT ablation. If you have minor concerns prior to your follow up appointment, please arrange to see your general practitioner (GP) or contact IntraCare.

Femoral (groin) site care

It is normal to experience some bruising at the puncture site. During the first few days after your procedure:

- Do not do any heavy lifting (>5kg) or strenuous exercise.
- Try not to excessively cough, sneeze, or strain as this puts pressure on the puncture site which may cause it to bleed.
- Do not sit in a bath, hot tub or spa. This reduces the possibility of bleeding or infection.
- Do not cross your legs while sitting.
- You may resume walking if your puncture site is not painful.
- If applicable, remove the dressing on your groin once the skin has healed (approximately 3 days).

Haematoma

A haematoma is a collection of blood under the skin that is sometimes painful. A small hard lump (similar in size to a pea) may also be felt under the skin and remain for several weeks:

- If a large lump (haematoma) occurs, lie down, and get another person to press down firmly on the centre of the haematoma for approximately 10 minutes.
- If after releasing pressure, the haematoma reoccurs, keep applying the pressure and go to your local accident and emergency department.

Bleeding

- It is common for there to be a small amount of ooze. If this occurs, re-apply a sticking plaster and lightly press for a few minutes.
- If there is significant bleeding, you should lie flat, and another person will need to apply firm pressure for 10 minutes. If this does not stop the bleeding, you will need to call an ambulance.

Seek immediate medical attention (dial 111 for an ambulance) if there is excessive bleeding from the puncture site or if you are experiencing severe chest pain.

Please take this booklet and your discharge summary with you if visiting the GP, afterhours or hospital.

**If you have any concerns after your procedure, please contact IntraCare:
Monday to Friday: 09 630 1961 (between 6:30am and 6:00pm).
For after-hours, weekends, and public holidays, contact 027 482 0763.**

How to find us

IntraCare Epsom

Both IntraCare and Allevia Hospital will be involved with your care for this procedure.

When you arrive, please report to the Allevia Hospital reception desk (number 1 on the map).

First Floor, Allevia Hospital Reception
98 Mountain Rd, Epsom, Auckland 1023

P: +64 9 630 1961 (Monday to Friday 6:30am–6:00pm)

P: +64 27 482 0763 (after hours, weekends and public holidays)

E: admin@intracare.co.nz

W: intracare.co.nz

Where to park

A 10 minute patient 'drop off zone' is available on the level 1 carpark. Head up the ramp as you enter into the carpark from the Main Entrance on Mountain Road.

The first 30 minutes are free and apply only once the vehicle licence plate number has been entered into a payment terminal. Patient parking is available on all levels of the car park. Parking limits apply, and parking spaces are marked (P90, P180, and All Day Parking).

The Allevia Hospital parking is managed by a separate company, and a fine may be issued if your vehicle breaches any of the parking terms and conditions.

There is free 120 minute parking available nearby on Mountain Road, Gilgit Road and Almorah Road after 9am.



Main entrance to patient and visitor car park
 ~ 250 spaces

Walkway to main reception
 Pedestrian access to main reception from car park

- | | |
|--|--|
| <ul style="list-style-type: none"> 1 Allevia Hospital reception and Allevia Radiology 1 reception 2 Canopy Cancer Care 3 ARO (Auckland Radiation Oncology) 4 Allevia Café and outdoor dining courtyard 5 Allevia Pharmacy 6 IntraCare 7 Awanui Labs (blood tests) | <ul style="list-style-type: none"> 8 Allevia Radiology 2 (CT, ultrasound) 9 The Heart Group 10 Allevia Radiology PET-CT Canopy Cancer Care 11 Allevia Specialist Centre 12 Allevia Radiology 1 (MRI/X-ray) A B C D E Allevia Specialist Centre entrances |
|--|--|



IntraCare

Intra Limited

E: admin@intracare.co.nz

W: intracare.co.nz

P: +64 9 630 1961 (Monday to Friday 6:30am–6:00pm)

P: +64 27 482 0763 (after hours, weekends and public holidays)