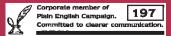


National Institute for Clinical Excellence

Partial left ventriculectomy

Understanding NICE guidance – information for people considering the procedure, and for the public



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Issue date: February 2004

To order copies

Copies of this booklet can be ordered from the NHS Response Line; telephone 0870 1555 455 and quote reference number N0439. A version in Welsh and English is also available, reference number N0440. Mae fersiwn yn Gymraeg ac yn Saesneg ar gael hefyd, rhif cyfeirnod N0440. The NICE interventional procedures guidance on which this information is based is available from the NICE website (www.nice.org.uk). Copies can also be obtained from the NHS Response Line, reference number N0438.

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About this information

This information describes the guidance that the National Institute for Clinical Excellence (NICE) has issued to the NHS on a procedure called partial left ventriculectomy (it is sometimes also called the Batista procedure). It is not a complete description of what is involved in the procedure – the patient's healthcare team should describe it in detail.

NICE has looked at whether partial left ventriculectomy is safe enough and works well enough for it to be used routinely for people with very serious heart failure that has happened because of another medical problem (see page 5).

To produce this guidance, NICE has:

- looked at the results of studies on the safety of partial left ventriculectomy and how well it works
- asked experts for their opinion
- asked the views of the organisations that speak for the healthcare professionals and the patients and carers who will be affected by this guidance.

This guidance is part of NICE's work on 'interventional procedures' (see 'Further information' on page 11).

About partial left ventriculectomy

The heart is a muscle that pumps blood around the body. Heart failure is the medical term used when the heart stops working properly and cannot keep a healthy amount of blood circulating round the body.

Medical conditions that can cause heart failure are:

- dilated cardiomyopathy, which is where the heart walls have become stretched and the heart becomes weaker as a result
- hypertrophic cardiomyopathy, which is where the heart walls have become thicker
- valvular disease, where the valves or 'doors' between the main parts of the heart don't work properly
- Chagas' disease, which is caused by infection with a parasite called *Trypanosoma cruzii* – heart problems can happen if a person has the infection for a long time.

People with heart failure may take medicines to help them. If their condition becomes bad, they may have surgery such as a heart bypass or a heart transplant. Or they may have a device put into their body that takes over the pumping of the heart while they wait for a transplant. Partial left ventriculectomy is an operation which aims to reduce the size of a part of the heart so it can pump blood more efficiently. Partial left ventriculectomy may also involve some surgery on the valves in the heart.

There are several different types of partial left ventriculectomy.

- In a lateral partial left ventriculectomy, a wedge-shaped section of heart is removed from the lower left part of the heart. If it's possible, the surgeon tries to leave the small muscles that keep the valves in place (these are called the papillary muscles).
- In an extended partial left ventriculectomy, the papillary muscles and the valve between the upper and lower parts of the left side of the heart are also removed.
- In an anterior partial left ventriculectomy, the portion that is removed is taken from the front part of the left side of the heart.

How well it works

What the studies said

Partial left ventriculectomy is only used for seriously ill people. NICE looked at studies that followed patients who'd had the operation. In

one study, half the patients who'd had a partial left ventriculectomy were alive 30 days later. In another study that followed what happened in 62 patients who had the operation, nearly all the patients were alive 30 days afterwards. In these patients:

- eight out of ten were alive 1 year after the operation (though over the year, some patients had other treatment as well, including use of a device that takes over pumping of the blood, and some patients still needed to have a heart transplant following the procedure)
- six out of ten were alive 3 years after the operation
- after 1 year, nearly half of the patients had not had another serious episode of heart trouble
- after 3 years, around one-quarter of patients had not had another serious episode of heart trouble.

Another study showed that a person who'd had a partial left ventriculectomy was not more or less likely to have died 1 year afterwards than a person who'd had a heart transplant.

What the experts said

The experts said that it was still unclear how well the partial left ventriculectomy worked, especially in the months and years after the operation. One expert said that it was difficult to judge which patients would be most likely to benefit from the operation. This expert also said the operation didn't improve the heart's ability to pump in many patients.

Risks and possible problems

What the studies said

The studies showed that up to one-half of patients had died 30 days after the operation. But it wasn't clear from the reports whether the patients died because they were so unwell or because of the operation itself.

Some of the problems that patients in the studies had were:

- congestive heart failure, where the heart fills up with blood and can't pump it out properly
- bleeding
- arrhythmias, where the heart doesn't beat normally

- kidney failure, where the kidneys stop working properly
- breathing difficulties
- infection.

What the experts said

The experts thought that the number of patients dying shortly after the operation was high. One expert said that after a time, a patient could develop an arrhythmia, a problem with one of the valves, or the heart could stretch and become weak. This expert thought that the main problem with the operation was that it involved removing some of the working heart muscle.

What has NICE decided?

NICE has decided that, if a doctor wants to carry out a partial left ventriculectomy, he or she should make sure that the patient understands what is involved and that there are still uncertainties over the safety of the procedure and how well it works. There should be special arrangements in place so that the patient only agrees (consents) to the procedure after this discussion has taken place.

NICE has also said that because the operation is suitable only for very ill patients, it should be carried out only in hospitals that can also provide other treatments for patients with severe heart failure.

Other comments from NICE

NICE commented that there were problems with the studies it looked at. These made it difficult for NICE to reach firm conclusions about the safety of the procedure and how well it worked.

What the decision means for you

Your doctor may have offered you partial left ventriculectomy. NICE has considered this procedure because it is relatively new. NICE has decided that there are uncertainties about the benefits and risks of partial left ventriculectomy which you need to understand before you agree to it. Your doctor should discuss the benefits and risks with you. Some of these benefits and risks may be described above.

Further information

You have the right to be fully informed and to share in decision-making about the treatment you receive. You may want to discuss this guidance with the doctors and nurses looking after you.

You can visit the NICE website (www.nice.org.uk) for further information about the National Institute for Clinical Excellence and the Interventional Procedures Programme. A copy of the full guidance on partial left ventriculectomy is on the NICE website (www.nice.org.uk/IPG041guidance), or you can order a copy from the website or by telephoning the NHS Response Line on 0870 1555 455 and quoting reference number N0438. The evidence that NICE considered in developing this guidance is also available from the NICE website.

If you want more information on heart problems, a good starting point is NHS Direct, telephone 0845 4647, or NHS Direct Online (www.nhsdirect.nhs.uk).

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