

Percutaneous thrombectomy for intermediate-risk or high-risk pulmonary embolism

Information for the public

Published: 29 November 2023

www.nice.org.uk

A pulmonary embolism is a blockage in an artery in the lungs (pulmonary artery), usually caused by a blood clot (embolus) that travels to the lungs from deep veins in the legs. An intermediate-risk pulmonary embolism affects how well the heart and lungs work but does not cause major blood circulation problems. A high-risk pulmonary embolism is a life-threatening condition caused by a large clot in a pulmonary artery. In this procedure, a thin tube is inserted into a large vein through the skin (percutaneous), usually in the groin. It is guided through the heart to the clot and used to remove it (thrombectomy). The aim is to rapidly remove the blockage, restore blood flow to reduce strain on the heart and avoid the bleeding risks of thrombolysis (clot-busting medication).

High-risk pulmonary embolism when alternative treatments are not suitable

Although there is not much good evidence about this procedure, it can be used for a high-risk pulmonary embolism in people who cannot have thrombolysis, or when there are no other suitable treatment options or alternative treatment options have not worked, because there are no other treatment options for this population. This procedure can only be done with special arrangements, which means you will have regular appointments afterwards to check how well it is working or if it has caused problems.

Intermediate-risk pulmonary embolism or high-risk pulmonary embolism when alternative treatments are suitable

For an intermediate-risk pulmonary embolism or high-risk pulmonary embolism when alternative treatments are suitable, this procedure can only be done as part of a research study. This is because there is not enough evidence to be sure how well it works. Your healthcare professional should talk to you about the research.

Is this procedure right for me?

You should be included in [making decisions about your care](#).

Your healthcare professionals should explain the risks and benefits of this procedure and how it is done. They should discuss your options and listen carefully to your views and concerns. They should offer you more information about the procedure. Your family or carers can be involved if you want or need them to be.

You will be asked to decide whether you agree (consent) to have the procedure. Find out more about [giving consent to treatment on the NHS website](#).

Some questions to think about

- How many appointments will I need?
- What are the possible benefits? How likely am I to get them?
- What are the risks or side effects? How likely are they?
- Will I have to stay in hospital?
- What happens if it does not work or something goes wrong?
- What happens if I do not want the procedure?
- Are other treatments available?

Information and support

The [NHS webpage on pulmonary embolism](#) may be a good place to find out more.

- [NICE's information on HealthTech guidance](#) explains what HealthTech is and how we assess it.
- [NICE's information on HealthTech recommendations](#) explains what special arrangements are and what only in research means.

[Thrombosis UK](#) (0300 772 9603) can give you advice and support:

You can also get support from your local [Healthwatch](#).

ISBN: 978-1-4731-8952-2