



Neurosurgery for mental disorder (NMD)

Explains what NMD is, what problems it can treat and how effective it is.

What is NMD?

Neurosurgery for mental disorder (NMD) is a type of brain surgery. Its aim is to destroy small areas of your brain that might cause mental health problems.

There are two main types of NMD used in the UK. These are called anterior cingulotomy and anterior capsulotomy. Both cannot be reversed once they have been performed. The [Advanced Interventions Service](#) has more information on these treatments, including information on risks and side effects.

There are reversible alternatives to NMD, such as [deep brain stimulation \(DBS\)](#) and [vagus nerve stimulation \(VNS\)](#).

Is NMD the same as lobotomy?

No. NMD is not lobotomy – the techniques used today are very different. In the past, brain surgery for mental health problems was called 'psychosurgery' and involved controversial techniques such as lobotomy. But this practice has not been used in the UK for many years.

What can NMD treat?

NMD is not recommended by the [National Institute for Health and Care Excellence \(NICE\)](#) to treat any mental health problems. This is because there is a lack of evidence about how safe or effective it is.

But in very rare cases, doctors may consider using NMD to treat:

- Severe, 'treatment resistant' [depression](#)
- Severe, 'treatment resistant' [obsessive compulsive disorder \(OCD\)](#)

'Treatment resistant' means that you have tried all other treatments for a mental health problem, and these have not worked. This is likely to include treatments like talking therapy and medication. It may also include less common treatments, like ECT.

Your doctor should only suggest NMD once you have already tried all these other options, and they haven't helped. This is because there are very serious risks with having NMD.

Does NMD work?

It's difficult to know well NMD works. This is because so few people have it. And there are different ways to perform it, which are hard to compare.

NMD is not a cure for mental health problems. But some studies suggest that it may help to reduce the symptoms of severe depression and OCD, when other treatments haven't helped.

Researchers don't know exactly how long these benefits last. But people can usually tell if their treatment has worked within 9 to 12 months of having surgery.

If you think NMD might help, you could ask your GP and psychiatrist about its risks and benefits. They will suggest you try other treatments first. Or if you have already tried other treatments, they may refer you to a specialist team. This team can assess whether NMD might help you.

Could NMD be performed without my consent?

No. In England and Wales, NMD cannot be performed without your consent. This includes if you lack the capacity to consent. The Mental Capacity Act may not be used to authorise a treatment which comes under section 57 of the Mental Health Act.

See our pages on [consent to treatment](#) for more information giving consent for mental health treatments.

How do I decide whether to have NMD?

Deciding whether to have NMD can be very difficult. It is important to think about the risks and benefits for you.

If your doctor recommends NMD, these are some questions you could ask to learn more. Or you could ask someone you trust, or an [advocate](#), to ask these questions for you:

- Why have you suggested NMD?
- Could it make me feel worse?
- What are the risks and side effects?
- Have you offered me every other available treatment?
- What treatments will you offer me after having NMD?

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- What will happen when I go into hospital? How long will I have to stay?
- How long will it take me to recover from surgery?
- When will I feel the effects?

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References are available on request.