

Cervical disc replacement

Why this operation has been suggested

Dr Kieran Hirpara, an upper-limb surgeon at Mater Private Hospital Rockhampton, starts with the least invasive options that suit your condition. Patients are generally referred to our clinic by their GP; if a physiotherapist has suggested you see us, you will still need a referral from your GP in order to be eligible for the Medicare rebate. At your first visit we take a history, examine you, and arrange imaging if it is needed. For long-standing neck problems we usually try non-operative care first, such as activity change, physiotherapy or hand therapy, and splinting. Surgery comes into the conversation when those steps have not given you enough improvement.

Cervical disc replacement means replacing a worn disc in your neck with an artificial one that keeps moving. It is an approved alternative to fusion surgery, where the disc is removed and the neck bones are joined solidly. We typically offer it for wear-and-tear disease at one or two disc levels in your neck. The main reason we may suggest it for you is that keeping the treated level moving lowers the chance of trouble developing in the discs next door. In studies, more than one in four patients needed further surgery within ten years after a fusion because of problems at a nearby level. This operation aims to ease your arm and neck pain and help you return to normal function.

Before the operation

Once surgery is planned, we give you clear instructions so the day runs smoothly. You will need to stop eating and drinking for seven hours beforehand. We ask for seven hours rather than the usual six so your operation can be brought forward if the theatre list runs early. Some medicines may need to be paused before surgery; we will tell you which ones and when. Bring a written list of everything you take, including tablets, drops and natural remedies. Arrange for someone to drive you home afterwards, as you will not be able to drive yourself. Wear loose, comfortable clothing that is easy to change out of. Imaging such as X-rays or an MRI scan helps us plan the operation, and we usually have these from your earlier visits. If you have other medical conditions, you may need blood tests or a review with the anaesthetist before the day.

On the day

You arrive at the hospital's surgical admissions unit, where you are checked in and prepared for theatre. You will meet the anaesthetist, the doctor who puts you to sleep for the operation and looks after you while it is done. This operation is done under general anaesthetic. A regional nerve block is sometimes added for post-operative pain relief; the anaesthetist will discuss this with you on the day. You are then taken into the operating theatre, where the operation is performed.

When it is finished, you wake up in the recovery area. Nurses watch over you there while the anaesthetic wears off. Once you are stable, you either move to a ward or go home, depending on the procedure and how your recovery is going. If you are going home the same day, the person you arranged to drive you will take you there.

What the operation involves

Cervical disc replacement is done through the front of your neck. Your surgeon makes a small cut there and moves the soft tissues aside to reach your spine. The worn disc is removed, and an artificial disc that keeps moving is placed in the space. The cut is then closed.

The aim is to take pressure off the nerves in your neck while keeping that part of your neck moving, rather than joining the bones solidly as fusion surgery does.

After the operation

You will wake up in the recovery area, where nurses watch over you while the anaesthetic wears off. Your neck may feel sore, and swallowing can feel a little odd at first; this settles. Pain relief is planned for you before you leave, and your team will explain what to take. You can usually get up and walk within a few hours, with help the first time. Your team will tell you whether you go home the same day or stay one night in hospital. Someone should stay with you for the first 24 hours after you get home. We leave the dressing on for about 10 days; please do not take it off before then unless we tell you to. We change or remove it when we see you.

Recovery

For the first few days your neck will feel sore and stiff, and swallowing may feel a little odd. This is normal and settles as the swelling goes down. Keep taking the pain relief your team planned for you, and move around gently rather than staying still in bed.

You will not wear a brace for this operation. Your neck is free to move, and that movement is part of how the artificial disc is meant to work. Your physiotherapist will guide you through simple exercises as your recovery progresses. Walking is encouraged from early on, and you can build up your distances at your own pace. Avoid heavy lifting, and anything that jars or twists your neck, until your surgeon tells you it is safe.

As the soreness settles you will notice the feeling in your arm and neck improving. Once you can hold and control the wheel comfortably with both hands, and react in an emergency stop, you can think about driving again. Our separate guide to driving after upper-limb surgery covers this in more detail. Returning to work depends on what your job involves; desk work usually comes back before heavier duties.

Recovery varies from person to person. Your timeline may differ from someone else's, and your surgeon and physiotherapist will guide you at each review.

What can go wrong

Most patients do well, but problems can occasionally happen. Your surgeon and the team monitor you closely to spot any issue early.

One reason this operation is chosen over fusion surgery is that it may lower the chance of trouble developing in the discs next door. This is not certain, and some people still need more surgery later for a worn disc at a nearby level. If new arm or neck pain returns months or years after your operation, tell us at your next review so we can check the levels above and below.

Because this operation is done through the front of your neck, the nerves to your voice box sit close to the surgical path. Some people notice a hoarse or weaker voice, or find their voice tires easily, in the early weeks. Most of these changes settle. If your voice is still not back to normal after a few weeks, bring it up at your review so we can arrange the right care.

Infection is uncommon but can happen around the wound or deeper in the neck. Watch for a deep, throbbing pain that does not ease with simple painkillers, redness that spreads out from the cut, oozing, or fevers and shivers. You may also feel generally unwell or notice swelling in your neck that makes swallowing harder. If you see any of these signs, call the clinic the same day. If you feel feverish and unwell out of hours, go to the emergency department.

Feeling anxious before surgery is common, but it matters for your recovery. Anxiety before the operation is linked with more problems afterwards, including complications and unplanned return visits to hospital. Tell your surgeon how you are feeling so support can be arranged before the day.

Nicotine use, including vaping, raises the chance of problems after neck surgery. If you use nicotine, tell your team early so we can help you stop before the operation.

Having a further operation on your neck carries more risk than the first one. If more surgery is ever discussed with you, we will explain this carefully.

The complications table on this page lists typical rates if you want the specifics.

When to call us

Most problems show up in the first few weeks, so it helps to know what to watch for. Call us if you have a fever, or if the skin around your cut becomes more red, swollen or starts oozing. Call us if your pain suddenly gets

much worse, or if new pain does not settle with your usual pain relief. Go to emergency if you have calf swelling or pain, or shortness of breath, as these can be signs of a blood clot. Go to emergency straight away if you lose feeling in your arm or hand, or find you cannot move it. If you are unsure whether a symptom is serious, call the clinic and we will help you decide what to do next.