

## Shared Decision Making – carpal tunnel syndrome

Next clinical review date March 2018

### Deciding what to do about carpal tunnel syndrome

This short decision aid is to help you decide what to do about your carpal tunnel syndrome. You can use it on your own, or with your doctor, to help you make a decision about what's right for you at this time.

There are five main options for treating carpal tunnel syndrome. The choices are:

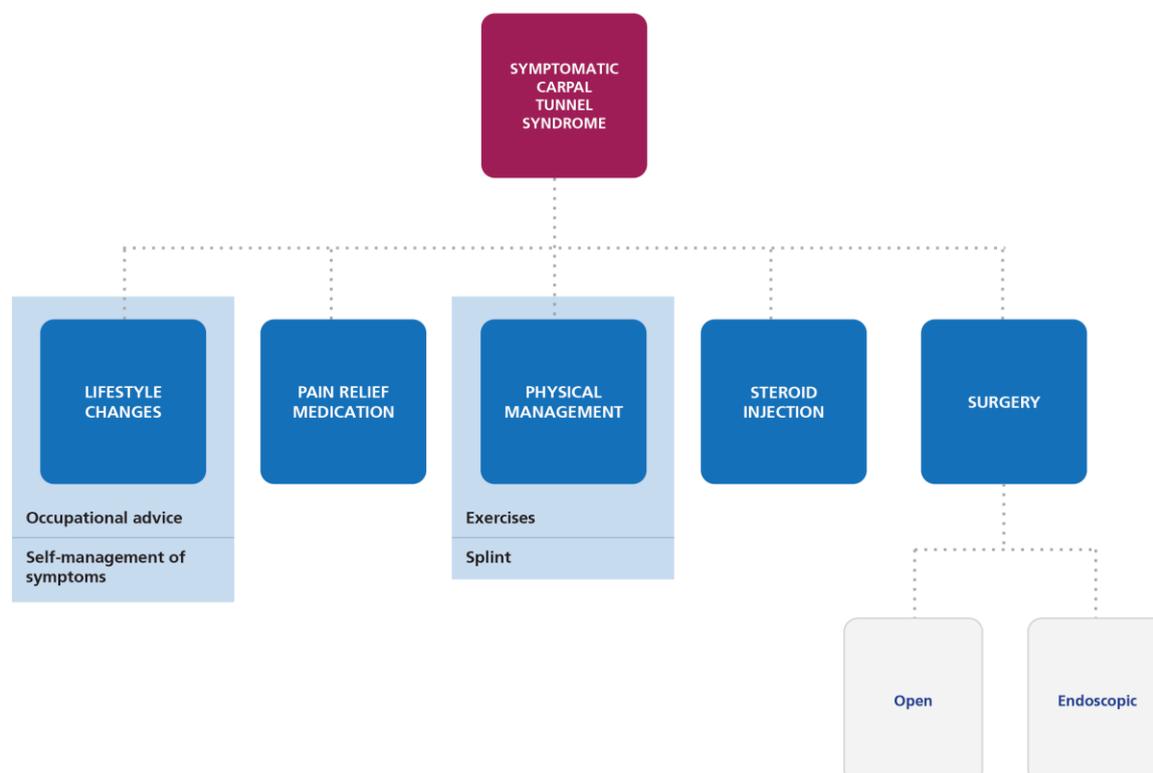
**Changing lifestyle** and working habits to put less pressure on hands, and self-managing symptoms

**Pain medications**, for quick relief from pain

**Physical management of symptoms**, including hand exercises and wrist splints

**Corticosteroid injections** into the carpal tunnel, to reduce pain, swelling, and pressure

**Surgery** to reduce pressure on the carpal ligament nerve.



## What are my options?

	What is the treatment?
<b>Lifestyle changes</b>	<p>People with carpal tunnel syndrome can choose to self-manage their condition. That just means they find out about the condition themselves, and do things to try to improve it.</p> <p>People with carpal tunnel syndrome can try making changes to their workplace or their daily lifestyle, activities, and hobbies that may help improve their symptoms.</p>
<b>Pain Relief Medication</b>	<p>Pain medications are drug treatments designed to reduce pain.</p> <p>Some of these tablets can be bought from a pharmacy without a prescription. These include paracetamol, paracetamol combined with low- strength codeine, and some non- steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen and aspirin. Other drug treatments need to be prescribed by a doctor.</p>
<b>Physical Management</b>	<p>Physical management of carpal tunnel syndrome usually means hand exercises or splinting.</p> <p>Hand exercises are exercises that involve stretching the fingers and wrist into different positions to see if this can release the pressure on the nerve. Wrist splints keep the hand and wrist straight and reduce the pressure on the trapped nerve.</p>
<b>Steroid Injection</b>	<p>Having a steroid injection (the full name of this type of medication is corticosteroid) means having an injection into the carpal tunnel. This is done by a doctor.</p> <p>Corticosteroids are sometimes called steroids for short, but they are not the same as the anabolic steroids used by some bodybuilders and athletes. Corticosteroids are similar to the natural chemicals the body makes to reduce swelling.</p>
<b>Surgery</b>	<p>Surgery involves an operation on the wrist. The surgeon cuts free a band of tissue called the carpal ligament from the median nerve. The operation is usually done under local anaesthetic. This operation can be done by either open or keyhole (also called endoscopic) surgery.</p> <p>Surgery is usually only recommended for people who have severe symptoms and have tried other treatments first</p>

	What is the effect on pain?
<b>Lifestyle changes</b>	<p>We don't know whether lifestyle changes can reduce the pain. There has not been much research in this area.</p> <p>We don't know for sure whether using specially designed keyboards or equipment can reduce pain for people with carpal tunnel syndrome.[14]</p>
<b>Pain Relief Medication</b>	<p>We don't know whether or not non-steroidal anti-inflammatory drugs (NSAIDs) or paracetamol help pain. There hasn't been much research. [15]</p>
<b>Physical Management</b>	<p>Nerve and tendon exercises may help to reduce pain. We don't know for sure because there has not been much research into this.[16]</p> <p>Wearing a wrist splint at night can help to reduce pain. About <b>50 in 100</b> people with carpal tunnel syndrome say their symptoms are improved three months after starting using a splint.[17]</p> <p>We don't know whether some splint designs work better than others, or whether wrist splints work better if they are worn all the time, just during the day, or just at night.[18]</p>
<b>Steroid Injection</b>	<p>A corticosteroid injection into the carpal tunnel can make the hand, arm, and wrist feel less painful and swollen.[19] People may feel an improvement for up to one month after the injection.[19]</p>
<b>Surgery</b>	<p>Six months after surgery, most people say their pain has improved.[29]</p> <p>The two types of surgery (open and keyhole) seem to work as well as each other in treating the pain of carpal tunnel syndrome.[29]</p>

	What is the effect on movement?
<b>Lifestyle changes</b>	<p>We don't know whether lifestyle changes can improve how easily people can move their hands or wrists. There has not been much research in this area.</p> <p>We don't know for sure whether using special keyboards or equipment can make it easier for people with carpal tunnel syndrome to move their hands or wrists. There has not been enough research.[14]</p>
<b>Pain Relief Medication</b>	<p>We don't know whether NSAIDs improve hand and wrist movement in carpal tunnel syndrome. There hasn't been much research.[15]</p> <p>Someone with carpal tunnel syndrome may find it easier to move their hand and wrist if they wear a splint as well as taking NSAIDs.[22]</p>
<b>Physical Management</b>	<p>We don't know whether nerve and tendon exercises can improve how well people can move their hands or wrists.[16]</p> <p>Wearing a wrist splint at night can help to improve how well someone with carpal tunnel syndrome can move their hand or wrist.</p> <p>We do not know whether one splint design works better than another, or whether wrist splints work better if they are worn all the time, just during the day, or just at night.[18]</p>
<b>Steroid Injection</b>	<p>Corticosteroid injections into the carpal tunnel can improve how well people can move their hands and wrists. People may feel an improvement up to one month after the injection.[19]</p> <p>Someone with carpal tunnel syndrome may find it easier to move their hand and wrist if they wear a splint as well as having a corticosteroid injection.[22]</p>
<b>Surgery</b>	<p>Carpal tunnel surgery usually makes it easier to move the hand and wrist.</p> <p>Six months after surgery, about <b>56 in 100</b> people say they can move their wrists better than before the operation.[29]</p>

	<b>What is the effect on what you can do?</b>
<b>Lifestyle changes</b>	We don't know whether lifestyle changes make it easier for people to do everyday things like write, grip or pinch harder, type, or pick up objects. There hasn't been much research.
<b>Pain Relief Medication</b>	We don't know whether NSAIDs make it easier for people to do everyday things like grip things, write, type, or pick up objects. There hasn't been much research.[15]  After 6 weeks of treatment, people with carpal tunnel syndrome who take NSAIDs and wear a splint say they find it easier to write and to pick up small objects.[22]
<b>Physical Management</b>	Nerve and tendon exercises or splinting may make it easier for people to do everyday things like grip or pinch things, write, type, or pick up objects. Not enough research has been done for us to be certain about this.[16]  People who have a corticosteroid injection as well as wearing a splint find it easier to do things such as write, button clothes, grip a telephone receiver, open jars, do housework, carry grocery bags, and bathe themselves.[24]
<b>Steroid Injection</b>	People who have a corticosteroid injection as well as wearing a splint find it easier to write and to pick up small and heavy objects.[22]
<b>Surgery</b>	Surgery improves movement of the hand and wrist in some people with carpal tunnel syndrome.[29]  Some people find that surgery does not improve movement or strength.[29]

	<b>What is the effect on your quality of life?</b>
<b>Lifestyle changes</b>	We don't know whether lifestyle changes can improve people's quality of life. There has not been enough research.[14] If making changes to the work environment or using special equipment helps people's symptoms, they may find that this improves their quality of life.
<b>Pain Relief Medication</b>	We don't know whether NSAIDs can improve quality of life for people with carpal tunnel syndrome. There hasn't been much research.[15]
<b>Physical Management</b>	We don't know whether doing nerve and tendon exercises, or wearing a splint at night, can improve people's quality of life. There hasn't been enough research. Wearing a wrist splint at night can help reduce pain and may make it easier to move the hand or wrist.[16][14] People may find that this improves their quality of life.
<b>Steroid Injection</b>	Corticosteroid injections may improve people's quality of life in the short term, but there hasn't been much research into this.[19]
<b>Surgery</b>	We don't know for certain whether surgery will improve people's quality of life. There hasn't been much research.[29] If people find

	that they have less pain after surgery, this may improve their quality of life.
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	What are the unwanted side effects or complications of this treatment?
<b>Lifestyle changes</b>	Making lifestyle changes, or using special keyboards or equipment, are unlikely to have any side effects or complications.[14]
<b>Pain Relief Medication</b>	NSAIDs can cause bleeding in the stomach when taken over a long period of time. They can also damage the kidneys. NSAIDs may increase the chance of heart attacks and strokes. NSAID tablets may not be suitable for some people with certain conditions, such as asthma, a peptic ulcer, or angina, or in people who have had a heart attack or stroke.  Paracetamol is unlikely to cause side effects in people who take the correct dose. Taking too much can damage the liver.
<b>Physical Management</b>	We don't know for sure whether nerve and tendon exercises can cause unwanted effects, because the research doesn't tell us. It's possible that some exercises could make symptoms worse.[16]  Wearing a wrist splint is generally safe. Some people may experience discomfort and swelling of the hands and wrist, difficulty falling asleep when wearing a splint at night, or pins and needles when taking it off in the morning.[18]
<b>Steroid Injection</b>	There is a chance that the nerve could be damaged when corticosteroids are injected into the carpal tunnel. The injection could also lead to an infection in the wrist.[26]
<b>Surgery</b>	Carpal tunnel surgery can cause unwanted effects. The most common are skin irritation, scarring, infection, and blood collecting under the skin at the site of the wound (haematoma).[29] The scar from surgery can be irritated and painful for two to three months after the operation. It's possible that surgery will not work and a second operation may be needed.[29]

	How much time is spent or hospital or on treatment?
<b>Lifestyle changes</b>	Some lifestyle changes require daily commitment, or take some getting used to, such as using new equipment. A session with an occupational therapist at work may be needed.
<b>Pain Relief Medication</b>	Some pain relief medication can be bought over the counter, without a prescription. A doctor may also prescribe pain medication. People with carpal tunnel syndrome might need to take medicines regularly to manage their pain.
<b>Physical Management</b>	People may need to go to hospital to have a number of physiotherapy sessions. They won't need to stay in hospital.

	Wrist splints are usually available from larger pharmacies, or a GP may be able to recommend a suitable supplier. The splint can be used for several weeks or months, depending on how severe the symptoms are.
<b>Steroid Injection</b>	Corticosteroid injections are usually given at a GP surgery or at a special clinic. To begin with, doctors usually recommend one injection. They may suggest more injections if necessary.[19]
<b>Surgery</b>	<p>Surgery for carpal tunnel syndrome is done in hospital. People should be able to go home the same day.</p> <p>People who have surgery will need to wear a bandage for about two days after the operation. Their doctor may recommend gentle hand, wrist, and elbow exercises to prevent stiffness.</p> <p>It's possible that surgery will not work and a second operation will be needed.[29]</p>

	How quickly does the treatment work?
<b>Lifestyle changes</b>	We don't know how quickly lifestyle changes or using special equipment can improve the symptoms. There has not been much research.[14]
<b>Pain Relief Medication</b>	If pain medications help, they should start working quickly, within minutes rather than hours.
<b>Physical Management</b>	<p>People who find that nerve and tendon exercises improve their symptoms say that the improvement happens within three months.[16]</p> <p>People who find that wearing a wrist splint at night helps their symptoms say they start to notice an improvement after about four weeks. People who wear wrist splints at night for four weeks are three times more likely than those who don't wear wrist splints to find that their symptoms improve.[18]</p>
<b>Steroid Injection</b>	<p>Corticosteroid injections may start working one week after treatment.[27]</p> <p>People might feel an improvement for up to one month after the injection.[19]</p>
<b>Surgery</b>	About <b>80 in 100</b> people who have surgery say their symptoms have improved three months after the operation.[29]

	How long do the effects of treatment last?
<b>Lifestyle changes</b>	For people who find that lifestyle changes or special equipment help, we don't know how long the benefit will last. There hasn't been much research.[14]
<b>Pain Relief Medication</b>	People need to keep taking pain medications for them to keep working. If pain medications stop helping, doctors may advise people to stop taking them.
<b>Physical Management</b>	<p>We don't know how long the benefits of nerve and tendon exercises may last, as most of the research has only looked at the first three months after treatment starts.[16]</p> <p>About <b>50 in 100</b> people say their symptoms are better three months after starting using a wrist splint.[17]</p> <p>People may continue to feel better even after they stop wearing the splint, but we don't know for certain. There hasn't been much research.[18]</p>
<b>Steroid Injection</b>	About <b>94 in 100</b> people say their symptoms improve soon after a corticosteroid injection. Two years after the injection this number is <b>60 in 100</b> .[28]
<b>Surgery</b>	<p>For people who benefit from surgery, the benefits last for at least six months, and can last a lifetime.[29]</p> <p>About <b>75 in 100</b> people who have surgery say that their symptoms improve. After two years, the number is <b>69 in 100</b>.[29]</p>

## What are the pros and cons of each option?

People with carpal tunnel syndrome have different experiences about the health problem and views on treatment. Choosing the treatment option that is best for the patient means considering how the consequences of each treatment option will affect their life.

Here are some questions people may want to consider about treatment for carpal tunnel syndrome:

- Are they willing to wait and see what happens to their symptoms?
- Do they want to be able to do more everyday things than they can manage at present?
- Are they willing to spend time having treatment?
- Are they willing to spend time recovering from treatment?
- Are they willing to try a treatment that may take a long time to have an effect?

## How do I get support to help me make a decision that is right for me?

People using this type of information say they understand the health problem and treatment choices more clearly, and why one treatment is better for them than another. They also say they can talk more confidently about their reasons for liking or not liking an option with health professionals, friends and family.

## References

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