

Neck injury (whiplash / neck sprain)

You have been diagnosed in the Emergency Department with a neck injury (whiplash). This leaflet explains how to manage your whiplash injury at home.

What is whiplash?

Whiplash is the term used to describe a neck injury caused by a sudden movement of the head forwards, backwards or sideways. The sudden, vigorous movement of the head damages the ligaments and tendons in the neck. Tendons are tough, fibrous bands that connect muscles to bone. Ligaments are the fibrous connective tissues that link two bones together at a joint. Whiplash is also referred to as neck sprain.

Although the ligament is not broken, whiplash can often take a long time to heal (sometimes several months). It typically causes pain, stiffness and a temporary loss of movement in the neck. Headaches, muscle spasms and pain in the shoulders or arms are other possible symptoms.

Whiplash is common after motor vehicle accidents in which a collision has jolted the head violently forwards, backwards or sideways. Whiplash can also be the result of a violent blow to the head (for example, during contact sports such as boxing and rugby).

What are the symptoms?

The symptoms of whiplash often take a while to develop after an accident.

Any inflammation (swelling) and bruising in the neck muscles won't usually be obvious at the time of the accident.

It may take 6 to 12 hours for the symptoms of whiplash to become apparent. The pain and stiffness is often worse on the day after the injury. The pain may continue to get worse during the days after the injury.

Common symptoms of whiplash include:

- Neck pain and stiffness.
- Neck swelling.
- Tenderness along the back of the neck.
- A reduction in, or loss of movement in, the neck.
- Headaches.

Other symptoms include: lower back pain, pain, numbness or pins and needles in the arms and hands, muscle spasms, dizziness, tiredness, difficulty swallowing, blurred vision, vertigo (the sensation that you are moving or spinning), and tinnitus (ringing in the ears).

Following a whiplash injury the dizziness, headaches, blurred vision and problems with swallowing should only last for a short while. See your GP if any of these symptoms don't clear up. Sometimes whiplash can cause memory loss, poor concentration and irritability.

CHILDREN: if symptoms persist, please come back to the Emergency Department.

What are the main causes of whiplash?

Motor vehicle accidents:

Car and motorcycle accidents are a common cause of whiplash because they often involve a sudden unexpected stopping force or a collision that makes the head move violently.

Whiplash can occur when the head is thrown forwards, backwards or sideways, which means it can develop following collisions to a person's front, back or side. Collisions that happen at slow speed can also cause whiplash.

Other causes

- A sudden blow to the head (e.g. during contact sports such as boxing, rugby).
- Being hit on the head by a heavy object.
- A slip or fall where the head is jolted backwards.
- Sometimes, whiplash in children can be a sign of abuse. Shaking a child violently can cause their head to jolt causing a whiplash injury.

How is whiplash diagnosed?

Tests and scans are not usually required in order to diagnose whiplash. It can usually be diagnosed from a description of symptoms.

To make a diagnosis, you will be asked about your symptoms and details of how the injury happened.

Further tests, such as an x-ray, computerised tomography (CT) scan or magnetic resonance imaging scan (MRI) may be recommended if another problem, such as a spinal injury, is suspected.

What is the treatment?

Whiplash is treated by dealing with the pain and stiffness in the neck and by healing the damage to the affected area. After a few days the symptoms of whiplash should begin to improve. In about 60% of cases, the symptoms improve significantly or completely disappear within one to four weeks.

It can sometimes take a few months for the symptoms of whiplash to disappear completely and some people still have some neck pain and stiffness for a long time after the injury.

There are a number of treatments that can ease the symptoms of whiplash. These are described below.

Ice pack

Apply an ice pack to the neck as soon as possible after the injury occurs to help reduce any inflammation (swelling).

Do not apply ice directly on to the skin. Wrap the ice in a towel to provide a protective barrier. Apply for 10-20 minutes at a time with at least 30 minutes in between applications, to allow the limb to feel warm to the touch and have normal sensation before reapplying.

Exercise

If you have whiplash, it is important to try to move your neck normally. If the pain in the neck is severe, you may need to rest the neck for a day or so until the pain eases.

After the pain has eased, exercise your neck gently so that it doesn't become stiff. Move the neck slowly in each direction, gradually increasing the range of movement. Continue with your normal daily activities.

Painkillers

Painkillers, such as paracetamol, will help to ease the pain caused by whiplash. Taking painkillers regularly rather than only when the pain is severe, may help to prevent the pain getting worse. Read the instructions carefully and do not exceed the recommended dose.

Non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen will help to reduce any inflammation (swelling) in your neck. **When taking painkillers, always follow the instructions on the leaflet that comes with the medicine.** NSAIDs may not be suitable for you if you have asthma, high blood pressure (hypertension), kidney failure or heart failure.

You should therefore check with your GP or pharmacist if you have one of these conditions or if you're taking any other form of medication.

If paracetamol and NSAIDs do not relieve the pain, your GP may prescribe a stronger painkiller, such as codeine. You may be recommended paracetamol and codeine together.

Good posture

Maintaining a good, upright posture by keeping your back straight while you're sitting, standing and walking can help prevent the pain and stiffness in your neck from getting worse. Supporting your head with a firm pillow will help you to maintain a good posture while you're sleeping.

Physiotherapy

If you have neck pain caused by whiplash, a physiotherapist may be able to help by using treatments such as manipulation and massage. They will be able to give you advice on neck exercises you can do to help relieve the pain and stiffness in your neck.

Osteopathy

Osteopathy uses manipulation to treat conditions caused by problems with the nerves, joints and muscles, such as back and neck problems and sports or work injuries.

Osteopathy is only available in some areas and, if it is available, you will need to be referred by your GP. Your GP may suggest using osteopathy alongside more traditional treatments and medicines.

Long-term problems arising from whiplash

In a small number of cases, the pain caused by whiplash can become chronic (long-term). In severe whiplash cases, the pain can last for more than six months before it disappears.

Prolonged pain may make it difficult for you to carry out normal daily activities or to enjoy leisure activities, and it may cause problems at work.

Sometimes this can cause anxiety and depression.

See your GP if you have chronic neck pain causing problems with doing your normal work and carrying out normal everyday activities.

Can I drive as normal?

Do not drive if you have neck pain and stiffness that prevents you from turning your head quickly. Check with your insurance company if you are not sure if you should drive.

Preventing whiplash

Correctly adjusting the headrests in your vehicle may help to prevent whiplash by stopping your head from moving backwards. It is difficult to prevent your head moving forwards or sideways.

Tell us your views

If you wish to discuss any aspect of your treatment and care, please speak to a senior member of staff or to the nurse looking after you. The matrons are also available during normal working hours and they welcome your views.

Friends and Family Test

Whatever your experience you can give feedback by answering the Friends & Family test question – ‘Overall, how was your experience of our service?’ – by going online www.royalberkshire.nhs.uk/get-in-touch/friends-and-family-survey.htm.

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

Dr Larry Fitton, Emergency Department.

Reviewed: December 2021.

Next review due: December 2023