



East Suffolk and
North Essex
NHS Foundation Trust

**Physiotherapy advice following
First/Cervical rib
excision and Thoracic
Outlet Syndrome (TOS)**

***Physiotherapy Department
Colchester Hospital
Tel: 01206 742454***



This leaflet explains more about returning to your everyday activities after your surgery for vascular TOS. If you have any further questions, please speak to a doctor, physiotherapist or nurse caring for you.

What is vascular TOS?

Vascular TOS is a condition that causes pain and numbness in the shoulder, arm and hand. The condition results from narrowing of the space where the blood vessels and nerves run from the trunk of the body to the arm, causing compression of the vessels.

What happens during surgery?

The surgery involves removal of the bone or soft tissue causing the compression, along with repair of the blood vessels if needed.

What are the benefits of surgery?

The aim of surgery is to reduce the symptoms of pain and numbness.

Will I be in pain?

After your surgery, it is normal to get some swelling, bruising and pain in the area of the operation. If it becomes more hot and painful, then please speak to the nurse or doctor.

Are there any precautions I should be aware of after surgery?

For the first week, do not lift your operated arm above shoulder height. Your physiotherapist will demonstrate what movements you can do, and what restrictions are in place.



Things to avoid

Avoid for 1 week

Avoid lifting items heavier than a cup of coffee.

Avoid shoulder flexion (lifting your arm up in front of you) or abduction (lifting your arm and elbow up and out to the side) above 90°. For example, reaching to get something from shoulder height.

Avoid external and internal rotation of shoulder outside of neutral positions, for example, reaching behind you.

Avoid for at least six weeks

Avoid extension combined with internal rotation. For example, tucking shirts in, using the operative arm for toileting or trying to do a bra up behind the body.

Avoid extension beyond neutral. For example, pushing up on the operated arm with the body forward on getting out of a chair. Make sure you can always 'see' your elbow – rest the elbow on a pillow when lying on your back.

Avoid for at least eight weeks

Extremes of external rotation and also abduction. For example, reaching back and out to get a seat belt.

Avoid for at least 12 weeks

Supporting of body weight through the arm. For example, pushing up out of a chair.

Please speak to your doctor about returning to activities and driving.



Will I have a follow-up appointment?

You will have a clinic appointment with your consultant approximately six weeks after surgery.

You should have an Outpatient Physiotherapy appointment approximately two weeks after discharge from hospital. This will depend on your local physiotherapy service and their waiting lists. Please speak to your physiotherapist on the ward if you have any concerns about your follow-up physiotherapy.

If you don't hear from a local physiotherapy service within six weeks, please contact the Vascular Department by email on vascular@esneft.nhs.uk

Will I need to do exercises after surgery?

In this leaflet there are some exercises recommended by your physiotherapist. The exercises help to treat TOS after surgery and focus on reducing symptoms to help you return to normal function.

What are the risks of not doing the exercises?

If you do not follow the recommended exercises, you are at a high risk of; developing further shoulder and neck stiffness, not regaining full function, and experiencing a reoccurrence of symptoms.

Maintaining range of movement

After surgery, the affected areas can become stiff. It is important to keep them moving as much as possible whilst not causing too much pain. Your physiotherapist will discuss which areas are important to focus on.



Posture

The position you hold your body in when standing or sitting is your posture. Slouching can cause the muscles in your neck to tighten, so it is important to make a point of correcting your posture now you have had your surgery.

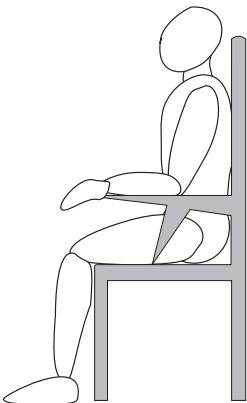
These images show good and bad posture. Try to get a family member or friend to observe you sitting and standing and let you know if you are in the right position.



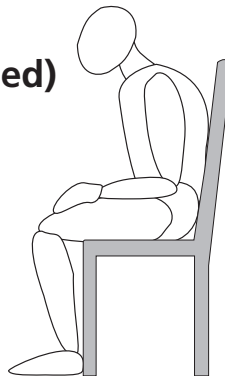
**Good posture ✓
(recommended)**



**Slouched posture ×
(not recommended)**



**Sitting up straight ✓
(recommended)**



**Slouching ×
(not recommended)**

Breathing exercises

The operation disrupts some of the muscles that assist with breathing, and post-operative pain may discourage you from taking a deep breath and coughing.

It is important that you are able to do these exercises and to get up and walk as soon as possible after your operation, to prevent issues such as a blood clot or chest infection. If pain is stopping you from doing any of these things, please speak to a member of the team.

Get yourself into a comfortable position, remembering the importance of good posture.

Start with normal gentle breathing using the lower abdomen (tummy). Place your hand on your tummy to feel as it gently rises and falls.

Now take a slow deep breath; this should be a gradual increase in the depth of the breath without tensing or elevating your shoulders. The breath out should be slow and relaxed.

Repeat this three times. If you need to, you can do some normal breaths in between each deep breath.

Then return to gentle breathing. Repeat this three times every hour for the first couple of days after surgery.

You can use this technique whenever you feel your breathing is getting out of control and/or your shoulders are becoming tight and elevated.

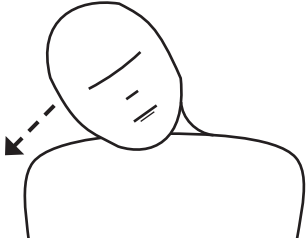
If you feel your breathing becoming more difficult, or you have a new cough, please contact a doctor.



Exercises to complete from the day after your surgery

The following exercises should be completed daily until your six-week follow-up appointment:

1 Neck stretch



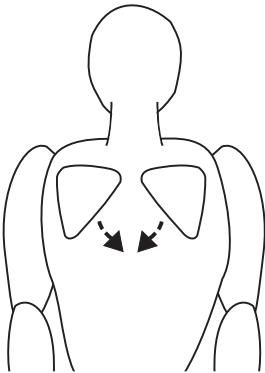
Look straight ahead

Bend your ear to your shoulder, without looking down or looking up.

Hold for 20–30 seconds. Repeat three times on each side, three times a day.

You can increase the repetitions when the exercise feels easier.

2 Shoulder blade squeeze



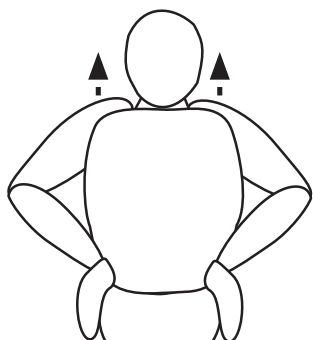
Squeeze your shoulder blades down and together.

Repeat three times, three times a day.

As this exercise becomes easier, you can increase the number of squeezes.

This should be a slow and gentle movement.

3 Shoulder shrug

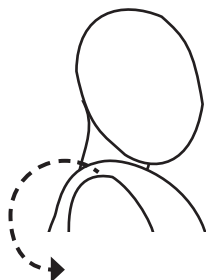


Keep your arms loose and relaxed by your sides. Shrug your shoulders up towards your ears and gently lower them back down.

Repeat three times, three times a day.

You can increase the repetitions when the exercise feels easier.

4 Shoulder circling



Keep your arms loose and relaxed by your sides. Shrug your shoulders up towards your ears, then circle them back and down.

Repeat three times, three times a day.

You can increase the repetitions when the exercise feels easier.

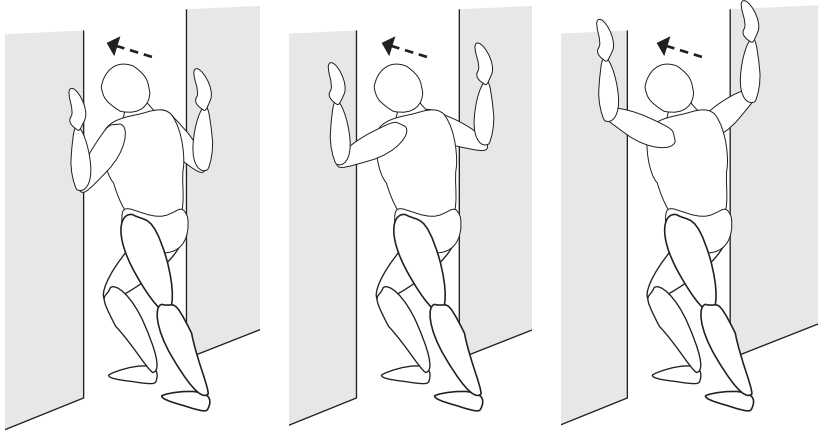
Exercises to complete after six weeks from surgery

You should have full range of movement by six weeks after surgery in your shoulder and neck. You should have been in contact with a physiotherapist by this time. If you have not please let your GP or surgeon know. You will be given a vascular clinic appointment about eight weeks after your surgery.

Before completing the exercises opposite, please discuss them with your physiotherapist.



Shoulder stretch



Stand in a door frame. Start with your elbows or arms low or with your arms straight by your side.

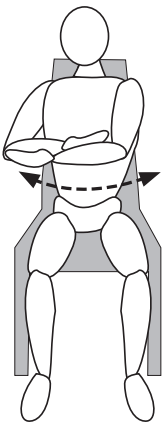
Lean your body weight forward until you feel a stretch in the front part of the shoulder or chest.

Hold for 20–30 seconds.

Repeat three times, three times per day.

You can increase the repetitions when the exercise feels easier.

Thoracic rotations



Cross your arms across your chest.

Slowly turn your body as if trying to look behind you, one way, and then the other.

Repeat three times, three times a day.

You can repeat the repetitions when the exercise feels easier.

Exercises to complete after 12 weeks from surgery

Gentle strengthening exercises on the post-surgical shoulder/arm with fitness resistance bands or 1 kg dumbbells.

Please do not carry out strengthening on the other shoulder as this may bring on symptoms of TOS if not previously treated with a rib resection.

Contact us

If you have any questions or concerns about your surgery, please contact the Vascular secretaries on **01206 742454**.

For any urgent concerns please contact the ward on **01206 744273** and ask to speak to one of the Vascular specialist nurses or the on-call Vascular registrar via the Colchester Hospital Switchboard on **01206 747474**.

NHS 111 offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day. Telephone **111** or go to the website at **111.nhs.uk**.

The NHS website at **www.nhs.uk** has online information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing.



Your experience matters

We value your feedback. Please help us improve our services by answering a simple question, in our online survey – “Overall, how was your experience of our services?”

This survey is known as “The Friends and Family Test”.

You can either scan this QR code with a smart phone camera:



Or type the following web address into your browser:
www.esneft.nhs.uk/get-involved/your-views-matter/friends-and-family-test/

Thank you very much.

Please ask if you need this
leaflet in an alternative format.

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www.esneft.nhs.uk



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