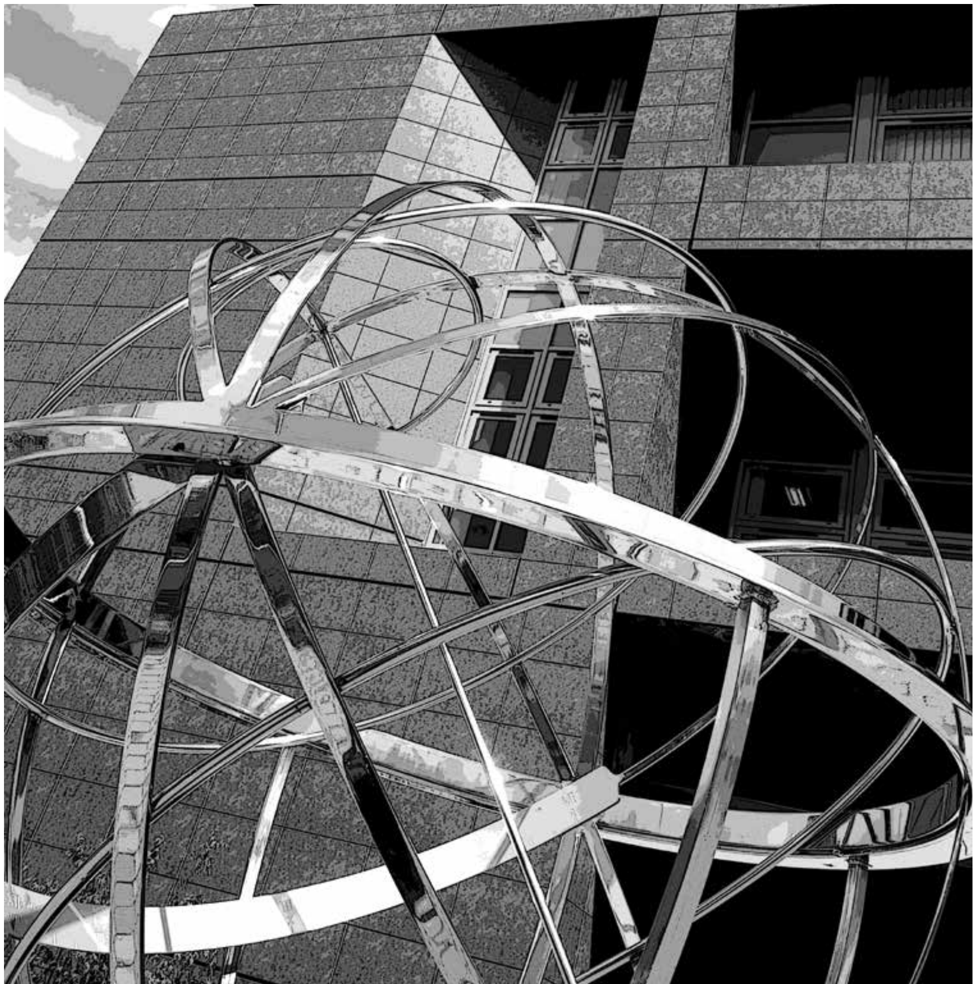
Oxford University Hospitals NHS
NHS Foundation Trust

Oxford Centre for Head and Neck Oncology

Neck Dissection

Information for patients



Introduction

This booklet has been written as a guide if you are having surgery to remove the lymph glands in your neck. It has been compiled by experienced staff and answers the questions most frequently asked by patients.

This information is only a guide. Your healthcare team will give you more detailed information as you need and want it.

We hope you and those close to you will find the information both reassuring and supportive.

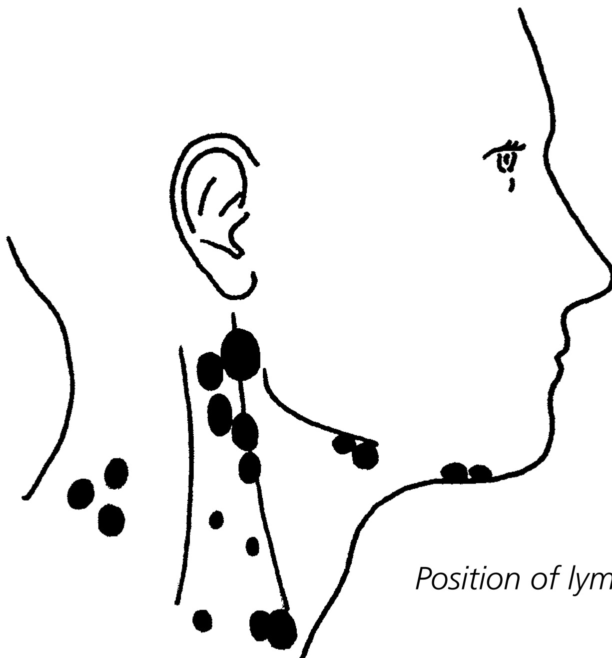
How do cancers spread?

Most cancers which start in the head and neck region have the potential to spread to other parts of the body; these are called metastases or "secondaries".

Cancers can spread in different ways. In the head and neck region the most common route of spread is through the lymphatic system in the neck. Sometimes cancers can spread throughout the lymphatic system or bloodstream to more distant areas of the body.

Lymph nodes or "glands" are like sieves, which catch any bacteria, viruses or cancer cells in the body. Each node drains a particular area of the body. The nodes in the neck drain the external skin of the head and neck and the internal lining of the mouth, throat and breathing tubes. Once one cancer cell has been "caught" by a lymph node it can grow and multiply there, and in time can spread to the next node down the chain and so on.

Lymph node removal is carried out with an operation called a neck dissection.



Position of lymph nodes

What is a neck dissection?

There are two types of neck dissection:

1. A **comprehensive neck dissection** is a surgical operation which aims to remove all the lymph nodes in the neck, between the jaw and the collarbones. This is usually planned if there is evidence that several lymph nodes in the neck are affected, particularly if they are bulky.

   As the nodes are small and stuck to other structures in the neck, they are usually removed with some surrounding tissues as well, to make sure all the diseased tissue is removed. The only structures which are removed are those which you can safely do without.

2. A **selective neck dissection** is usually carried out when the amount of disease in the neck is small or when there is a suspicion that there may be microscopic amounts of cancer cells in your neck. In this operation, only those groups of lymph nodes that experience has shown to be most often affected in your type of cancer will be removed.

In both operations the tissues are sent to the laboratory to search for cancer cells and to see how extensive the spread has been.

When will I be admitted for surgery?

You will be asked to come for an appointment in the pre-assessment clinic, before your surgery. During this appointment we will assess your fitness to undergo a major operation.

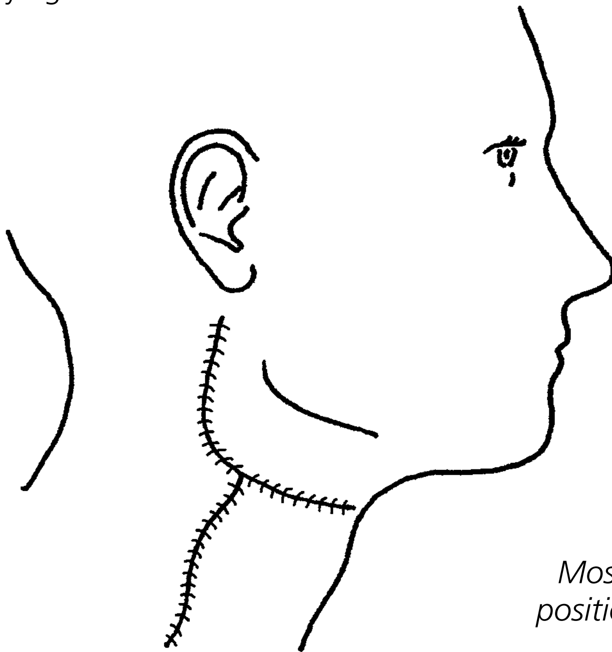
Usually you will be admitted in the afternoon on the day before the operation, but this may be earlier if you have other medical conditions. You are likely to need to stay in hospital for one week after the operation, depending on the extent of the surgery.

What can I expect from the operation?

It is likely that the neck dissection is only part of the whole operation you will be having; we may also need to remove the 'primary' or original tumour.

The operation will be performed under a general anaesthesia, which means that you will be asleep throughout.

The surgeon will make one or two long cuts to your neck. The skin will then be folded back, to allow the surgeon to access to the underlying structures.



Most common position of scars

After the operation

At the end of the operation you will have one or two drain tubes coming out through your skin, to drain out the blood underneath the wound. This helps to prevent infection and blood clots from forming. You are also likely to have stitches or skin clips to close the wounds. The scars usually run along the natural creases of your neck.

When the skin is lifted up during the operation it loses its nerve supply, so it may be numb after the operation. This means that you may not have much pain afterwards. If we also need to remove one of the large muscles from your neck, it will look a little flatter on the side of the surgery.

What is the risk of complications and side effects?

Numb skin:

The skin of your neck will be numb after the surgery. This will improve to some extent, but you should not expect it to return to normal.

Stiff neck:

You may find that your neck is stiffer after the operation. You may need further physiotherapy for your neck and shoulder, if they are affected. We may be able to make you an outpatient appointment for this near to your home.

Haematoma:

Sometimes the drain tubes which are put in during the surgery can become blocked or fail to work. This can cause blood to collect under the skin and form a clot (haematoma). If this happens, you may need further surgery to remove the clot and replace the drains.

Chyle leak: (pronounced 'kile')

Chyle is the name given to digested fats that are carried from the gut in the lymphatic system. Occasionally one of the lymph channels, called the thoracic duct, is damaged during a neck dissection, usually on the left side. This can be hard to spot during the operation.

If this occurs, chyle can collect under your skin or may be seen in your neck drain. If you have a chyle leak you will usually be

placed on a fat-free or modified fat diet for a period of time (usually 2-3 weeks) until the leak has healed, or you may be taken back to theatre to repair the leak. There is a small chance that we will need to feed you intravenously (through a small tube into a vein). This would mean we'd need to keep you in hospital longer than originally planned.

Damage to the accessory nerve:

This is the nerve to one of the muscles of the shoulder. Surgeons try hard to preserve this nerve but sometimes it needs to be removed because it is too close to the tumour to leave behind.

If this nerve is damaged or removed, you will find that your shoulder is a little stiff and it can be difficult to lift your arm above shoulder height. Lifting heavy weights, like shopping bags, can be difficult. We can arrange physiotherapy to maximise your remaining shoulder movement.

Damage to the hypoglossal nerve:

Very rarely this nerve (which makes your tongue move) also has to be removed, if it is affected by the tumour. If this is done, you will find it difficult to move food from that side of your mouth and it can also interfere with your swallowing. If this happens, you may need to eat and drink a modified diet (such as a soft or liquified diet).

Your speech sounds may also be less clear if this nerve is affected. The Dietitian and Speech and Language Therapist will help to support you and offer advice.

Marginal mandibular nerve damage:

This nerve is also at risk during the operation, but the surgeons will try hard to preserve it. If it is damaged you will find that the corner of your mouth will be a little weak. This is most obvious when smiling. Lip closure may be weaker on that side, which may occasionally result in a little dribbling when eating and drinking. The Speech and Language Therapist can suggest exercises and strategies that may help improve this movement.

This nerve is often only weakened temporarily and will recover over a period of weeks or months.

Will I need any other sort of treatment?

This will depend very much on what treatment you have already had, where your tumour is and what type of tumour it is. You may also need to have radiotherapy to improve your chance of a cure.

This will be discussed at your first post-operative outpatient appointment.

How to contact us

If you have any questions or concerns, or need any further information, please contact the:

Head and Neck Cancer Specialist Nurses

Tel: 01865 234 346 (Monday to Friday, 8.30am to 4.30pm)

You should also have been given the Information about the Head and Neck team leaflet, which includes websites which you may find helpful.

Exercises following head and neck surgery

Why exercise?

The following exercises are designed to help prevent stiffness and discomfort in your neck and shoulders after surgery.

The exercises should be done slowly and gently. Do not force the movement. They should not be painful, but it is normal to feel a stretching sensation. If you experience pain, please discuss this with the Head and Neck Cancer Specialist Nurses or doctors, either on the ward or at your outpatient appointment.

Which exercises and how often?

You may start the exercises when all the drains have been removed from your neck.

The exercises are most effective when carried out little and often. Repeat each exercise 5 times. Aim to exercise 5 times a day.

After the surgery you should continue these exercises for 3 months.

If you are having radiotherapy it is important to continue to exercise throughout the treatment.

Neck exercises

Repeat 5 times and exercise 5 times a day. Hold each position, gradually increasing the time to 30 seconds as you become more comfortable.

1. Posture correction

Sit down. Look straight ahead with your head upright. Keep your shoulders level and held back.

Use a mirror to check your position. This is your starting position for all the exercises.

2. Flexion

Bend your head down, tucking your chin into your chest. Hold in this position and then return to starting position.

3. Extension

Tilt your head back pointing your chin towards the ceiling. **Keep your lips closed**. Hold this position then return to starting position.

4. Side flexion

Bend your head to the side, trying to get your ear as close to your shoulder as you can. Hold position and return to starting position. Repeat on both sides.

5. Rotation

Turn your head to the side. You are trying to look over your shoulder. Hold this position and then return to starting position. Repeat on both sides.

6. Neck retraction

Keep your head level and pull your chin in. Do not tip your head forwards. Hold this position then return to starting position.

7. Lateral flexion and extension

Tilt your head back pointing your chin towards the ceiling. **Keep your lips closed**. Turn your head to the side. Hold this position and then return to starting position. Repeat on both sides.

8. Elevation

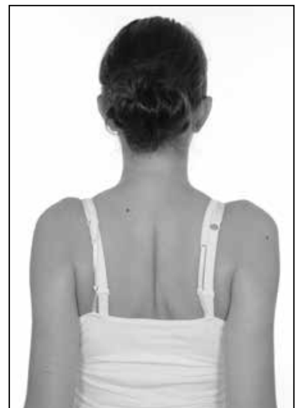
Lift your shoulders up towards your ears as far as you can. Try to keep your shoulders level with each other. Hold this position and then return to starting position.

9. Depression

Lower your shoulders away from your ears as far as you can. Hold this position then return to starting position.

10. Retraction

Pull both of your shoulder blades backwards. You will feel a stretch across your chest. Hold this position and then return to starting position.



11. Shoulder flexion

Bend your arm. Lift your elbow forwards and upwards as high as you can. Hold this position then return to starting position. Repeat on both sides.

12. Abduction

Bend your arm. Lift your elbow out towards the side until it is level with your shoulder. Hold position and return to starting position. Repeat on both sides.

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALS@ouh.nhs.uk**

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