Oxford University Hospitals
NHS Foundation Trust

Oncology: Neck Dissection

Information for patients

Oxford Centre for
Head and Neck Oncology

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

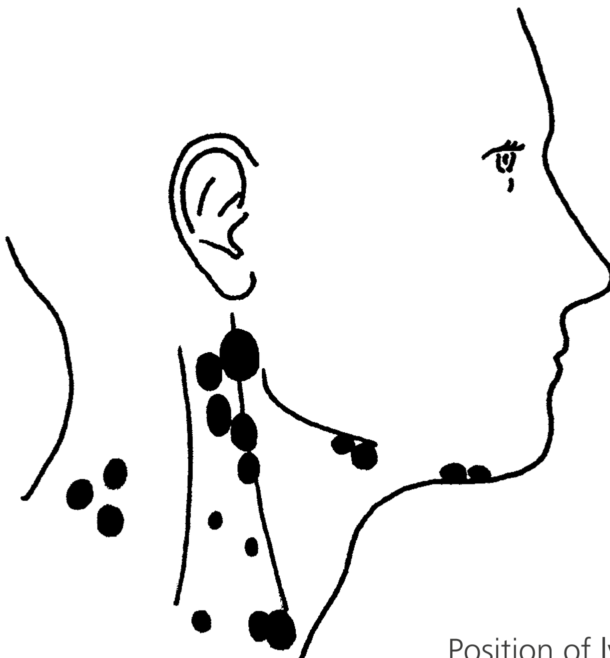
This information is only a guide. Your healthcare team will give you more detailed information as you need and want it.

We hope you and those close to you will find this 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.



Position of lymph nodes

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.

When a 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.

Before your operation, your surgeon might know there is cancer in your lymph nodes. In this case, you will have a neck dissection during your surgery to remove the cancer.

If your surgeon doesn’t know whether there are cancer cells in your lymph nodes before you have surgery they will suggest removing the lymph nodes closest to the cancer. They can then send the nodes to the laboratory to check them for cancer cells.

What is a neck dissection?

There are two types of neck dissection:

1. **A comprehensive neck dissection** is an 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.

   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 cancerous tissue is removed. The only structures which may be removed are those 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 are usually most often affected by the type of cancer you have will be removed.

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

Preparing for the operation

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

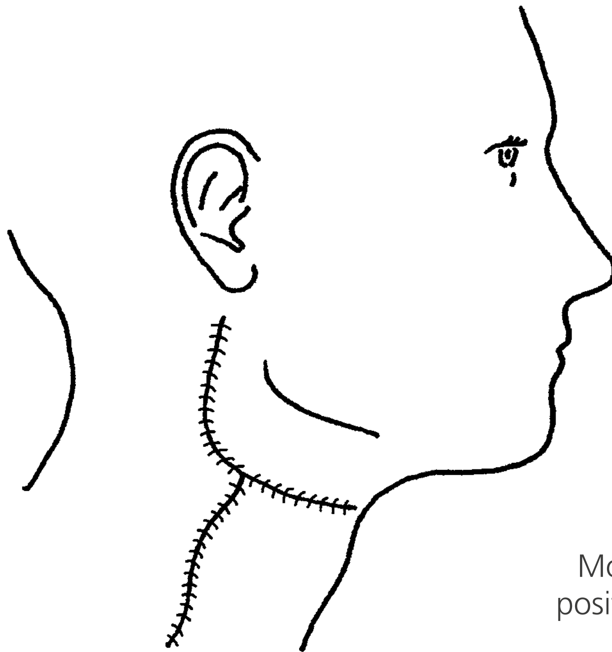
You may be admitted in the afternoon on the day before the operation. You will need to stay in hospital for at least 3 days, after the operation, depending on the extent of the surgery and whether you are having any reconstructive surgery.

What happens during 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 carried out under a general anaesthetic, which means you will be asleep throughout.

The surgeon will make one or two long cuts to your neck (as shown on the diagram below). 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 narrow tubes (called drains) coming out through the skin on your neck, to drain the blood from underneath the wound. This helps to prevent infection and blood clots from forming.

You are also likely to have stitches or skin clips, which will have been used to close the wounds. The scars usually run along the natural creases of your neck, which will help them to be less visible after they've healed.

When the skin is lifted up during the operation it loses its nerve supply, so it may be numb after the operation.

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.

Risks and complications

There are always risks associated with any operation. Risks that are more specific to this operation include:

Numb skin

The skin around or in the area of your surgery will be numb after the operation. This will gradually improve to some extent, but you should not expect it to return to normal.

Stiff neck

You may find that your neck is stiff after the operation. You may need further physiotherapy for your neck and shoulder, if they are affected. If required, your physiotherapist will refer you for follow-up physiotherapy when you have left hospital.

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, can become 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 (2 to 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 you will need to be fed intravenously (through a small tube into a vein). If this happens, we would 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. The surgeons will try hard to preserve this nerve, but it may need 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 may be difficult to lift your arm above shoulder height. Lifting heavy weights, like shopping bags, is likely to 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 the side of your mouth where the nerve used to be. 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 liquefied diet). You will be guided by your Speech and Language Therapist if this is required.

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.

The ability for your lips to close together may also be weaker on that side, which might 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 the 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 with you 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:

Head and Neck Cancer Specialist Nurses.

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

For physiotherapy related information, please contact:

Physiotherapy Team.

Telephone: **01865 235 391**
(8.00am to 4.00pm, Monday to Friday)

Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

Author: Compiled with the help of patients, carers and the Head and Neck Oncology Team

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charity@ouh.nhs.uk | 01865 743 444 | hospitalcharity.co.uk

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