NHS
Royal Cornwall Hospitals
NHS Trust

Neck dissection

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What is a neck dissection?

A neck dissection is an operation that will be part of your cancer treatment. It aims to remove lymph glands in your neck that the cancer may have spread to from the primary tumour site. There are three different types of neck dissection and a decision as to what type is most appropriate will be made based on the disease being treated, patient factors and the distribution of the lymph nodes affected.

- **Radical neck dissection** – aims to remove all areas of lymph nodes, the main muscle in the neck called sternocleidomastoid, the internal jugular vein and the spinal accessory nerve.
- **Modified radical neck dissection** – aims to do the same, however sparing one or more of the aforementioned structures.
- **Selective neck dissection** – aims to remove only the affected lymph node area, thus preserving the sternocleidomastoid muscle and internal jugular vein.

We may be operating on one side or both sides of your neck, depending on which lymph nodes are affected.

Why do I need it?

Your individual cancer treatment plan has been discussed at our multidisciplinary team (MDT) meeting. This includes surgeons, cancer doctors, radiology doctors, pathologists, cancer specialist nurses and speech and language therapists. The outcome from this meeting was to recommend a neck dissection as part of your treatment with a curative intent.

A neck dissection may only form part of your treatment. We may also be operating on the primary tumour site at the same time as your neck dissection. You may already have had treatment to both the primary tumour site and the lymph glands in your neck in the form of radiotherapy and / or chemotherapy. Alternatively, you may go on to have radiotherapy and / or chemotherapy following your neck dissection. All these variations on treatment plans depend on your tumour type, size, site and individual factors. The specific combination of therapies and the order in which you receive them will be tailor made for your specific cancer diagnosis following careful consideration at our MDT meeting.

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Are there any alternatives?

A neck dissection has been recommended to you by the MDT as a part of your treatment. If there are any alternatives, they will be discussed with you.

How do I prepare for it?

1. Depending on your age and past history of medical problems, you may be invited to have a preoperative assessment, either in clinic or over the phone, to make sure that any other medical issues are addressed to prepare you for the general anaesthetic and surgery.
2. Following your preoperative assessment, you will receive a date for surgery. Please confirm this appointment.
3. Do not eat anything for at least **6 hours** before the operation. This is to make sure your stomach is empty when you have your anaesthetic. Drinks containing fats (eg. tea or coffee with milk) and sweets all count as food. You can drink water or a drink without fats in it (eg. black coffee) until **2 hours** before your operation. You may also have small sips of water to take tablets. There is a hospital leaflet about having an anaesthetic. Ask the staff for a copy if you would like one.
4. You will be given a general anaesthetic during the operation, which will keep you asleep. The anaesthetist will come and see you before the operation to discuss this with you. You will be able to ask them any questions you may have about the anaesthetic.

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5. A member of the surgical team will also see you on the day of surgery. This is usually the surgeon that will perform your operation. Feel free to ask any questions you have about the operation or what will happen afterwards. The surgeon may examine you again. They will also check that the consent form has been completed and signed.

Despite our best efforts to perform your operation on the day as planned, we have no control over bed availability in the hospital. Occasionally, we may not be able to perform the operation on the date and time planned, and this may not be apparent until you have arrived at the hospital – please be prepared for all eventualities.

What does the operation involve?

The procedure is performed under general anaesthesia and can take 3-4 hours. You will have a long incision (cut) on the neck, which will be determined by the type of neck dissection being undertaken. The skin is then folded back to allow the surgeon to access the necessary structures and remove the lymph nodes. The incision will be closed with staples or stitches. You may have plastic tubes inserted with bottles attached to them to drain the area.

Are there any risks or complications?

As with all procedures, there are risks from having this operation:

General Risks

The general risk to a healthy patient of problems arising from an anaesthetic is very small, but serious general medical conditions do occur, despite best efforts to prevent them, such as thromboembolic events (eg. blood clots of legs, lungs, brain) and other heart, lung and neurological conditions. The risk of death for a healthy person having non-emergency surgery is not known exactly but is thought to be 1 in 100,000. Risks are higher for those with existing medical problems. We will always take every possible step to keep you safe during your operation.

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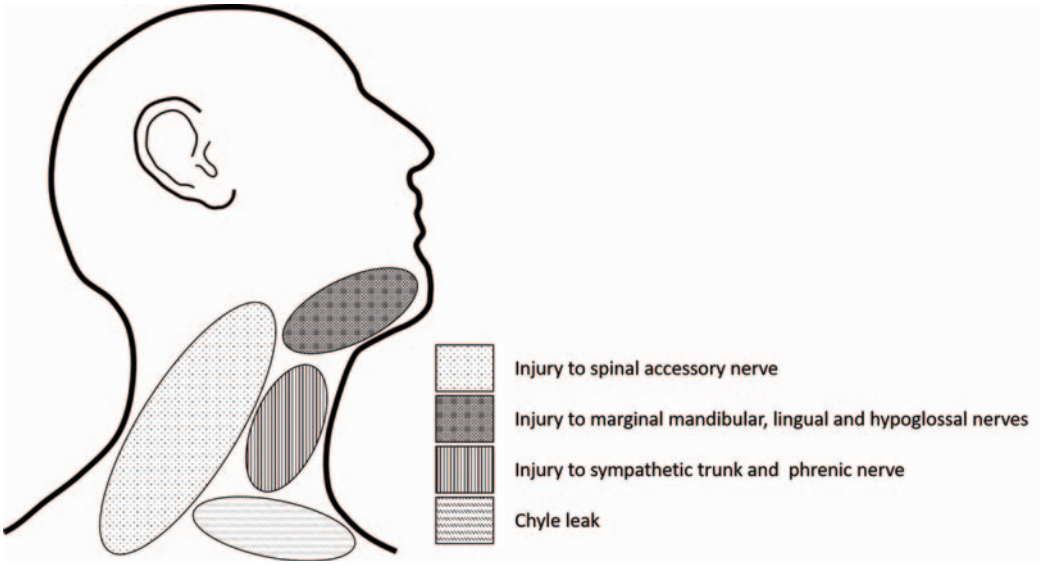
Specific risks

Significant, unavoidable or frequently occurring risks:

- **Infection** – infection of the wound can happen.
- **Bleeding** – uncommon, can usually be managed conservatively, rarely requires further surgery to open the wound up to identify the bleeding site so it can be controlled.
- **Scarring** – usually heals very well but it takes over a year to mature, and the appearance of the scar does vary between individuals. Some may be dissatisfied with the appearance.
- **Seroma** – fluid collection under the skin that may need to be aspirated with a needle.
- **Numbness / wound discomfort** – the skin of your neck, face and ear may be numb after surgery. This will return to some extent, but do not expect it to return to normal. There are tiny cutaneous nerves that are cut in making the incision, which can lead to wound discomfort or altered sensation that can be a longstanding problem.

Uncommon and/or serious risks:

- **Chyle leak** – chyle is the name given to the fluid that is carried within your lymphatic system. It is mainly fats that have been absorbed by your gut and empty into a big vein in the root of your neck via a lymphatic duct. The duct can be damaged during surgery, but this is not apparent at the time. A chyle leak will become evident because we will be able to see it in your drain bottles. We treat a chyle leak in a variety of ways depending on how much chyle is discharging and how long after the operation it becomes apparent. It may be that you are placed on a fat free diet for a period of time (2-3 weeks) or even fed intravenously. In other cases you will be taken back to theatre to repair the leak. In exceptionally rare circumstances it may be required for the cardiothoracic surgeons or interventional radiologists to perform a procedure to block off the duct lower down in your chest.
- **Residual or recurrent disease** – we aim to remove all the cancerous tissue. However, there are some occasions where the cancer has spread to areas where it cannot be removed. This may not have been apparent on your scans. For example if it is involving the main artery in your neck, breathing pipe or other structures vital for life we will not be able to safely remove it.



Equally it may be that the cancer has already spread microscopically down nerves or blood vessels to another area in the neck or chest. This sort of spread is often impossible to pick up on scans or at the time of operation. In this circumstance it may be that the cancer will crop up in this unexpected area at a later date. In either of these circumstances your case will be discussed at our MDT and a further plan proposed.

- **Damage to the spinal accessory nerve** – this nerve controls some muscles in your shoulder. Before your operation we may warn you that we need to remove this nerve in order to remove the cancer. If not we will try our best to preserve it, although it may still not work. If it is damaged or removed you will find your shoulder will be stiff and it can be difficult to place your hand behind the back of your head, for example when brushing your hair. In these circumstances we will arrange for you to have physiotherapy to maximise your remaining function.
- **Damage to the hypoglossal nerve** – this nerve controls the movement of your tongue. Rarely, we have to remove this nerve if it is affected by cancer. If this is done or it is damaged in removing cancer you will find it difficult to move food from the affected side of your mouth. It can also affect the clarity of your speech. If this does occur our speech and language therapists will help you with a modified diet and exercises.
- **Damage to the marginal mandibular nerve** – this nerve controls the muscles that move the corner of your mouth. We may have warned you before the operation that we will need to remove this nerve in order to remove the cancer. If this is not the case we will try our best to preserve it, however it is still at risk of damage. If it is damaged or removed you will find that the corner of your mouth droops down, giving you an asymmetrical smile and your lower lip may catch on your teeth when chewing. Additionally you may find that you are prone to drooling on that side.

The function of nerves may be permanently impaired, however if it is going to recover this will typically happen over the course of 12 months.

Rare and/or serious risks:

- **Damage to the lingual nerve** – if this nerve is removed or damaged you will find that one half of your tongue is numb and you will develop a metallic taste. This nerve is at less risk than the nerves listed above.
- **Damage to the phrenic nerve** – if this nerve is removed or damaged one half of your diaphragm will not work properly. If you have no underlying lung problems you may not notice this, however it can cause long term breathlessness. Damage or removal of this nerve is exceptionally rare.
- **Damage to cervical sympathetic trunk** – these nerves are involved in the control of your pupil, upper eyelid and sweat glands on one side of your face. If these nerves are damaged or removed you will find that one your pupils is constricted, eye lid droopy and your face will not sweat on one side. Damage or removal of these nerves is exceptionally rare.

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Will I have any pain or discomfort?

You will have some pain following the operation. During the operation and immediately after we will ensure your pain is treated with strong painkillers. We will ensure you have some strong painkillers for the first 48 hours – after this most patients do not experience significant pain unless there is a cause not related to the surgery.

What happens afterwards?

- You will have a sore throat as you will have had a tube in your throat to help you breathe during the operation. You can buy simple painkillers over the counter and take as needed.
- Upon return to the ward you will need to rest in bed as you may well feel sleepy from the anaesthetic. We strongly advise you not to leave the ward area.
- Your condition will be closely monitored and you will be given medications to keep your comfortable.
- You will be propped up in bed as this will support your breathing and also help to reduce the anticipated swelling in your neck.
- You will probably have one or two wound drain(s) stitched in place. These are sealed devices that drain away any tissue fluid or blood from the wound site. This reduces neck swelling and encourages healing. The amount drained is carefully monitored when you are on the ward. Your surgeon will advise when these drains can be removed and typically one or both drains will be removed in the first 48-72 hours following your operation.
- Nursing staff will help you with all your activity as required until you can safely do more yourself.
- Fluids and food can be taken as soon as you are feeling able to. You may find it more comfortable to start with a soft diet.
- You will usually be able to go home as soon as your drains are removed, provided there are no other issues.

How do I care for my wound?

- Keep the wound dry for about 4 days – then it can be washed gently with warm soapy water.
- Any stitches or clips that need to be removed can be removed at your GP practice. This can vary between 7 and 14 days – we will provide instructions when you are discharged.

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What should I look out for?

- The wound might become infected (it may get red and sore) – please see your GP in the first instance or call the ward if you are unable to see your GP.
- A degree of swelling is very much to be expected, however if you are concerned by swelling or if it happens suddenly please either contact the team or attend the Emergency department.
- If the edges of your wound start to come apart please contact the team and we will arrange to see you.

When will I get my results?

Usually within 3 weeks. All results will need to be discussed in our MDT meeting and recommendations for next steps made. We will then arrange follow up with you shortly thereafter.

Will I need any follow up?

We will be following you up regularly in our joint head and neck cancer clinic. Initially this will be frequent, particularly if you require further treatment. However over time this can become less frequent. We will typically follow you up for a total of 5 years following the completion of all treatment. This will depend on the nature of your disease.

Contact us

Wheal Coates Ward – 01872 256340 / 252828

Cancer nurse specialists – 01872 253475