Neck Dissection: Physiotherapy advice following head and neck surgery
What is a neck dissection?

A neck dissection is a surgical procedure, under general anaesthetic to remove lymph nodes in your neck.

There are two types of neck dissection:

1. Radical (complete) neck dissection: all the nodes between jaw and collar bone

2. Modified, partial or selective neck dissection: those groups of node or structures that may allow cancer to spread are removed.

Donor flaps

Depending on the extent of your surgery your surgeon may need to use skin or bone from another area to reconstruct the area initially being removed. The most common areas are pictured below

Including

- Radial forearm free flaps – forearm
- Free fibula flap – shin area
- Pectoralis major musculocutaneous flap – chest muscle
- Latissimus Dorsi – back muscle

You may find your range or strength in the donor site area has been affected, your physiotherapist will assess you after your surgery and provide specific exercises to aim to improve this.
What to expect after your surgery

Your nurse will be routinely checking your wound and vital observations (such as blood pressure, heart rate and oxygen levels). It is not uncommon for you to feel drowsy after your operation, so you may need to have additional oxygen via nasal cannula/mask.

Critical care

If you require closer observation you may need to stay in critical care following your surgery. This will allow you to be looked after by a nurse on a one to one or one to two basis.

Your time in critical care may be difficult to remember, but do not worry the nurse may write a dairy for you to fill in any gaps if require

During your stay in critical care, you will be seen daily by a physiotherapist (please see below for the role of the physio). You may also be assessed by a speech and language therapist (please see role of speech and language therapist below) if your swallow or speech has been effected by the operation.

Line and Drains

You will likely have a small tube (drain) in place after your operation to allow any excess fluid to drain away from your wound. You should avoid lifting your arm above 90 degrees or shoulder height (please see below for exercises) whilst this is in place. This will be removed once most of the fluid has been drained. Usually within 2-3 days.

You will likely have IV (intravenous) line/s in place to provide fluids until you are able to drink properly again and give you medication.

NG tube (Nasogastric tube)

If you have difficulty swallowing following your surgery due to swelling, therefore you may need a NG tube to provide you with nutrients whilst this improves. In some cases this is long term but in most cases this will be removed before you leave or once your swallow is safe.

Tracheostomy

Depending on your surgery you may require a tracheotomy. Tracheostomies may stay in place for up to 10 days. In some cases this period may be extended for various reasons, including ongoing swelling, increased secretions and difficulties clearing them. Your team will keep you updated throughout the weaning process (plans to remove) and aim to have this removed as soon as is safe to do so.
Role of the physiotherapist

Why do I need Physiotherapy after the operation?

You may find that your neck and shoulder movements are restricted after surgery but this is often due to swelling and the position of any drains and clips in your skin. Gentle exercise will also help to reduce any swelling in the neck and help prevent shoulder and neck pain and stiffness.

You may need additional input if the accessory nerve in your neck which controls muscles in your shoulders has been affected. If you are affected, you may develop some shoulder weakness which your physiotherapist can help with.

A physiotherapist will likely assess you a day or two after surgery and thereafter as required until you are discharged. If indicated they will refer you on for further physiotherapy after you leave hospital.

Things that may be helped by a physiotherapist include:

- Chest clearance
- Reduced neck or shoulder range of movement/ strength
- Scar tissue
- General mobilisation
- Donor flap site loss of range or strength – additional exercises will be specifically provided for this

Your physiotherapist will be available to answer any questions or to provide any further information; please do not hesitate to ask.

Exercises

When can I start my exercises?

Most patients will have a drain in place for two to three days following surgery. It is best to start your exercises when this neck drain has been removed so you can move more easily in all directions. It is safe to start the exercises when stitches or clips in your neck are still in place.

The exception is deep breathing exercises/ active cycle of breathing. This exercise can be commenced immediately as will help keep your lungs clear to prevent infection.
1. Deep breathing – active cycle of breathing

- sitting in a relaxed position
- complete gentle deep breaths
- hold for 3 seconds if possible
- then breath out slowly

If you feel you have secretions (phlegm) that needs clearing follow the cycle to the right

- Your physiotherapist can go through this with you to ensure you don’t have any questions

2. Scapula setting

Scapular setting

- Gently pull your shoulder blades back and down towards each other.

Repeat x……..

3. Shoulder Flexion

Active

- In a sitting or standing position,
- Lift your arms up forwards, one at a time, letting your thumb lead the way.
- If you are unable to lift your arm to 90 degrees you can complete the exercise active assisted see below.

Repeat x ………………

With or Without theraband
Active assisted exercises

- Fold your arms and place the painful arm on top
- Use your good arm to help raise the affected arm up as far as comfortable then slowly lower
- Take arms across your body and out to the side
  Repeat x……..

4. Shoulder abduction

- In a sitting or standing position, lift your arm up sideways with the thumb leading the way.
- Return to the start
  Repeat x………………
With OR without theraband

5. Internal external rotation

- Sitting or standing upright
- Keeping your elbow close to your side
- Elbow bent to 90 degree
- Bring your hand towards your stomach
- Then out to the side as far as possible
  Repeat this x .................
With OR without theraband

6. Shoulder rotation

- In a sitting or standing position
  shrug your shoulders up towards your ears and roll them back.

  Repeat x.......................
7. **Neck rotation**
   - In a sitting position
   - Turn your head to one side until you feel a stretch.
   - Hold for approximately three seconds and then repeat turning your head to the other side.
   - Repeat x ........................

8. **Postural advise**

   **How?**
   - when sitting, use a firm support in the small of your back
   - when standing, stand tall with your shoulders back and down but relaxed

   **Why?**
   - Helps to prevent scar tissue tightening
   - Helps keep bones and joints in correct alignment, reducing abnormal wearing of joint surfaces
   - Reduces stress on ligaments
   - Allows muscles to work more efficiently
   - Helps prevent muscle strain and overuse

   **Things to avoid**
   - Sitting slumped in chair
   - “text neck” - holding phone between shoulder and head

   **How often should I do these exercises?**
   It is always best to do ‘little and often’ rather than lots of exercises at one time. Exercising three times a day for between five and ten minutes is recommended. Your Physiotherapist will be able to advise you on exactly what you should be doing.

   **How will I know if I have done too much?**
   If you over-exercise you may well feel sore and stiff the following day. The best policy is to avoid this if possible making sure you exercise **gently and slowly**.

   **Is there anything I should avoid?**
   Following a neck dissection we ask you to avoid lifting heavy weights for a few weeks after your operation
Other members of the therapy MDT (multidisciplinary team)

Speech and Language Therapist (SALT)

If you are having difficulties swallowing, with your speech or voice after your surgery you will be referred to a speech and language therapist. You may have already seen them pre-operatively for advice and education.

A speech and language therapist will see you both as an inpatient and outpatient depending on your individual assessments and plan.

Your speech and language therapist will be happy to answer any question and will provide you with exercises, advice and assist with Trache weaning (process in removing Trache) (if you have one).

Dietician

It is common to have restrictions on oral feeding following surgery. It is important to ensure dietary needs are met to aid healing and recovery following your surgery. Therefore, dieticians often work closely with SALT to provide the best care.

Returning to normal activity

When will I be able to drive?

You will need to ensure you have adequate range in your neck to return to driving. Be comfortable wearing a seat belt and to be able to perform an emergency stop. You should inform your insurance company of changes to your mobility. You can discuss this further with your consultant.

When can I start doing my housework?

It is recommended that you only lift light objects for approximately 4-6 weeks on your affected arm e.g. shopping bag/kettle. Avoid repetitive tasks that strain affective arm.

After 4-6 weeks you can begin gradually increase amount you are doing.

When can I return to my regular sport?

Depending on your surgery you can begin to restart your sport after two months, ensuring you gradually introduce yourself back into it.

It is advisable to discuss with your consultant first to ensure he/she is happy with the healing of your surgery site.

If you require radiotherapy post-surgery, you may not feel ready and this time may be extended. Radiotherapy can cause symptoms including swelling, ear ache, nausea/vomiting, loss of appetite.
Road to recovery

Things to consider to aid your recovery please feel free to ask if you have any questions or require further support.

Keeping active

Try to remain as active as possible. Walking is a good form of exercise that you can continue throughout your treatment. If you find you are feeling tired, try little as often rather than a lot in one go.

Stopping smoking

Smoking before or after surgery increases your risk of post op complications, stopping smoking even for a few days before your operation can improve your healing and recovery. Please contact your GP for further advice. You may find useful advice and guidance on NHS stop smoking website found at: www.nhs.uk/livewell/smoking/Pages/stopsmokingnewhome.aspx

Good nutrition

It is important to following any instructions given to you from the dietician to ensure you are getting adequate nutrition to allow wound healing. This will also allow you to return to normal activities as soon as possible. Please also ensure you follow any swallowing advice from your speech and language therapist.

Scar tissue

Scar tissue can form around the incision site. Massage can help to reduce the size and shape of your scar and can help improve the range in your neck. This should be started once the scar is fully healed (no scabbing) and post radiotherapy. Your consultant can advise further when this should be started and how to do it.

Here’s briefly how to massage your scar?

- Use a non-perfumed moisturising cream like aqueous or e45 cream
- Gentle and light circling motion over scar tissue, moving skin over tissue rather than rubbing it - 10 mins 2 x day
- Minimum of 3 months, ideally for 2 years as scars will change and tighten for several years.

Returning to work

The time it takes to return to work will depend on whether you have radiotherapy and the type of work you do. Discussing this with your consultant and employer will help you decide when is best for you.

Your physiotherapist will be happy to answer any further question you have, please feel free to ask.
Useful links


NHS Stop smoking: http://www.nhs.uk/livewell/smoking/Pages/stopsmokingnewhome.aspx

Live Well (Stop Smoking, Drinking, Weight Loss): www.livewelldorset.co.uk

Head and Neck Dorset Support Cancer Group: www.handscancergroup.org

References

Guys St Thomas Hospital

Sherwood Forest Trust

Merseyside Regional Head and Neck Centre: http://www.headandneckcancer.co.uk/Index.aspx

Contact Details

For any further information please contact your Physiotherapist via the C3 ward staff. Tel: 01202 448033 Or telephone Respiratory Physiotherapy Office 01202 442582 (open 8-4.30, Monday – Friday)

For further health-related information please ask the relevant department for an Information Prescription or contact:

The Health Information Centre,
Longfleet Road, Poole, Dorset,BH15 2JB Telephone: 01202 448003

We can supply this information in larger print, on audiotape, or have it translated for you. Please call PALS on 01202 448499 or the Health Information Centre on 01202 448003.

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