Swallowing Exercises for Patients with Head and Neck Cancer

This leaflet is for people undergoing radiotherapy to the head and neck. It aims to provide swallowing rehabilitation exercises to minimise the swallowing difficulties experienced during treatment and optimise long-term swallowing function.

Swallowing rehabilitation exercises

Radiation to the head and neck can lead to difficulty swallowing, called dysphagia. People with dysphagia may have difficulty swallowing food, fluids, and saliva. Dysphagia can occur during radiotherapy treatment, or may develop or continue long after treatment has ended. The following exercises may help to maintain and/or improve swallowing function and reduce the potential effects of radiation on swallowing.

Exercises to introduce (SLT to tick recommended exercises). See below how to carry out each exercise:

<table>
<thead>
<tr>
<th>Exercise</th>
<th>Introduce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shaker exercise</td>
<td></td>
</tr>
<tr>
<td>Mendelsohn manoeuvre</td>
<td></td>
</tr>
<tr>
<td>Falsetto</td>
<td></td>
</tr>
<tr>
<td>Masako/Tongue hold exercise</td>
<td></td>
</tr>
<tr>
<td>Effortful swallow</td>
<td></td>
</tr>
<tr>
<td>Tongue retraction</td>
<td></td>
</tr>
<tr>
<td>Gargle</td>
<td></td>
</tr>
<tr>
<td>Pitch glides</td>
<td></td>
</tr>
</tbody>
</table>

How often should you complete the exercises?

Aim to complete each exercise x4 per day, x10 repetitions each time, unless advised otherwise. If recommended to complete the Shaker exercise, aim to complete this x2 per day. If you have any concerns/questions please contact the SLT team.

Details and instructions for swallowing exercises

Strap muscle exercises

The strap muscles in the neck move the larynx (voice box) up and out when you swallow to protect your airway and help food and fluids pass through to your oesophagus (gullet). These exercises work on strength and flexibility.
Patient Information

Shaker exercise:
- Lie flat on your back (on the floor or bed). Keep your shoulders on the floor or bed.

Part 1:
- Raise your head to look at your toes.
- Hold this position for 1 minute (you may need to gradually build up to this time), then relax for 1 minute.
- Repeat 2 more times.

Part 2:
- Raise your head to look at your toes, and then relax your head back down.
- Repeat 30 times in a row.

These exercises can be modified by your SLT if you are unable to complete them lying flat.

Mendelsohn manoeuvre:
- Place your fingers on your larynx (voice box).
- Swallow your saliva.
- You will be able to feel your larynx lift and lower as you swallow.
- Now swallow again. When you feel your larynx lift, don’t let it drop. Hold your larynx up in that position with your throat muscles for several seconds.
- Relax and breathe normally.

Falsetto:
- Take a deep breath and let it out on an ‘ee’
- Slide up the scale as high as you possibly can until you reach a high squeaky voice
- Hold that high voice for as long as you can
- Rest

Base of tongue exercises
The base of your tongue creates pressure to initiate your swallow and help push food toward your oesophagus. These exercises are designed to strengthen the base of your tongue and improve the pressure which helps to push your food and drink down.

Masako/Tongue hold exercise:
- Hold your tongue firmly between your teeth.
- Swallow your saliva (you may feel tension in the throat and difficulty starting the swallow).
- This exercise can be modified by your SLT if you are unable to complete it.

Effortful swallow:
- As you swallow, squeeze hard with all of your throat muscles.
- Feel as though you are putting extra effort into your swallow.
Tongue retraction:
- Pull your tongue back in your mouth as far as possible.
- Hold for one second then relax.

Gargle:
- Pull your tongue back in your mouth.
- Pretend to gargle as hard as possible.
- Hold for five seconds then relax.

Voice exercise
To help maintain laryngeal flexibility.

Pitch glides:
- Gentle humming up and down a scale

Benefits
While further research in this area is needed, completing exercises during and/or after radiotherapy treatment may support:
- Improved swallowing/voice function.
- Shorter duration of non-oral feeding.
- Improved weight maintenance/gain.
- Reduced restrictions on oral diet.
- Improved swallowing-related quality of life.
- Reduced or delayed impact of radiation-induced fibrosis (thickening and scarring of tissue causing stiffness/reduced flexibility).

Risks
Every individual’s dysphagia is different, and not all exercises are indicated for all patients; please only complete those exercises advised by your SLT.

Radiotherapy side-effects including pain and fatigue may affect your ability to complete exercises. Please discuss with your SLT if you are experiencing difficulty completing the exercises you have been recommended.

Alternatives
In addition to completing swallowing rehabilitation exercises (or if you are unable to carry these out) it is important to continue swallowing food, fluids, and saliva as much as possible throughout your radiotherapy as swallowing itself is an effective exercise.

Contacts/Further information
If you have any questions about these exercises, please speak to your SLT or contact the speech and language therapy department on 01223 216200.
Swallowing Exercises for Patients with Head and Neck Cancer

References/ Sources of evidence

- Rehabilitative Swallowing Exercises: Head and Neck Radiation Therapy Patients © 2008 The University of Texas M. D. Anderson Cancer Center, 10/14/08 Patient Education Office

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