

## Vestibular Rehabilitation

### **Cawthorne-Cooksie Exercises**

Reference Number: ULHT-LFT-3151 v2

Issued: November 2023

Review Date: November 2025

#### What is Vestibular Rehabilitation?

Vestibular rehabilitation (VR) is an exercise-based programme that is designed to encourage the central nervous system to compensate for problems in the inner ear.

Following thorough examination, your Audiologist will work with you on a management plan that may include exercises that you can do at home.

VR exercises involve head and eye movements that are essential in stimulating and retraining the vestibular system.

VR is highly effective for most adults with disorders of the vestibular system and has been shown to be more effective than generic exercises in resolving symptoms of imbalance.

#### How does Vestibular Rehabilitation work?

Vestibular compensation is a process that allows the brain to regain balance control and minimise dizziness symptoms. This can help you adapt when there is damage to, or an imbalance between, the right and left vestibular organs (balance organs) in the inner ear.

Essentially, the brain copes with the disorientating signals coming from the inner ears by learning to rely more on alternative signals coming from the eyes, ankles, legs and neck to maintain balance.

The basis for the success with VR is the use of existing neural mechanisms in the human brain to adapt and compensate.

The extent of vestibular compensation and adaptation is closely related to the retraining stimulus. Specifically designed VR exercises will take advantage of the brain's ability to restore symmetry. This should result in much better control of the balance system.

Other factors, such as your age, general health and eyesight can affect the degree to which your body will adapt to the changes in your balance system.

#### Before you get started

Grade the severity of your symptoms as you do these exercises, using the following scale.

- 0 Symptom free
- 1 Mild discomfort
- 2 Discomfort
- 3 Severe

Only when the symptoms clear, or after two weeks, move on to the next exercise.

Bear in mind that a conscious effort should be made to seek out the head positions and movements that cause vertigo, but only as far as you can tolerate them. This is because the more frequently vertigo is induced, the more quickly the brain compensation mechanism builds up.

You may have been prescribed medication to ease your symptoms and should continue with these while working on this exercise programme.

#### What are Cawthorne-Cooksie Exercises?

The balance parts of the two ears complement each other by sending equal impulses to the brain which are essential for the maintenance of equilibrium of the head and body.

If either or both balance organs are damaged, equilibrium is upset. The result of this is vertigo or giddiness, which may be accompanied by nausea and vomiting. Although this condition may be very frightening it is not serious, in that it does not, in itself, threaten life.

Cawthorne-Cooksie exercises are special exercises that can, in many cases, overcome the difficulties experienced with the disequilibrium. The purpose of these exercises is to build up a tolerance mechanism and the more diligently and regularly they are carried out, the sooner the symptoms should reduce.

#### How to use the exercises?

- The exercises should be performed for approximately 10 minutes twice daily.
- You should perform the exercises daily for the most benefit.
- Begin with level 1.
- Should this exercise make you feel off balance, dizzy or unstable, practice this level for the remainder of the 10 minutes.
- Do not overdo the exercises. If symptoms become too severe, take a break.
- Perform the exercises as directed on the following pages. ONLY when the symptoms clear, or after two weeks of level 1, then move on to level 2 and so on.
- Follow the above until you are able to perform all levels comfortably and easily and keep active in the long term.
- Try to incorporate some of the principles in your everyday life if possible.
- You could restart exercises if your symptoms ever return.

#### Level 1 - Eye movements:

Try and keep your head still for these eye movements. Start slowly and then speed up the movements:

- a) Look up and down
- b) Look from side to side
- c) Focus on fingers at arms length. Maintain focus while moving fingers towards nose and away again 20 times.

#### Level 2 - Head and eye movements:

Stay seated for these head movements. Start slowly and then speed up the movements, but do not strain your neck.

- a) Bend your head forwards and backwards keeping your eyes open.
- b) Turn your head from side to side, keeping your eyes open.
- c) Repeat both of the above movements but this time with your eyes closed.

#### Level 3 - Arm and body movements:

- a) Stay seated for these movements. Start slowly and then speed up the movements.
- b) Shrug shoulders (20 times).
- c) Circle shoulders (20 times).
- d) Rotate at the waist to the right and then to the left, i.e. upper part of the body moves together (20 times).
- e) Turn head side to side through full range of rotation, slowly but without straining your neck. (20 times)
- f) Repeat above doing two slow turns followed by one rapid turn.
- g) Repeat above followed after a couple of seconds pause, by three rapid turns.
- h) Repeat above turning with eyes closed.

#### Level 4 - Up and moving about:

This level should only be performed after completing the previous levels and if you feel that it is safe and are physically able to do so.

- a) Repeat all level 3 while standing.
- b) Sit down and stand up 20 times with eyes open.
- c) Sit down and stand up 20 times with eyes closed.
- d) Walk up and down a slope where possible.
- e) Walk up and down steps where possible.

#### What happens next?

You will have good and bad days with your balance. The aim of vestibular rehabilitation and these exercises is for your body to adapt as much as possible to your balance problem, but there are many factors that can impact upon this.

While intervention can help with this compensation, it is likely that you will still have some functional limitations.

Your Audiologist will provide you with information about your balance problem and work with you to develop a management plan that best suits your needs.

# If you have any questions or queries, please do not hesitate to contact us:

ENT suite, Outpatients Pilgrim Hospital, Boston PE21 9QS Telephone: 01205 446478

Clinic 6, Outpatients Lincoln County Hospital LN2 5QY Telephone: 01522 573254

Email: ulth.audiology.department@nhs.net

General statements that are made in this leaflet do not apply in every case, as each patient is an individual. Your Audiologist will advise you on any specific after care.

#### Audiology Department

United Lincolnshire Teaching Hospitals NHS Trust has worked with AccessAble to create detailed Access Guides to facilities, wards and departments at our sites. www.accessable.co.uk/united-lincolnshire-hospitals-nhs-trust

United Lincolnshire Teaching Hospitals NHS Trust endeavours to ensure that the information given here is accurate and impartial.

If you require this information in another language or alternative format, please email the Patient Information team at <u>ulth.patient.information@nhs.net</u>