

**Community and Mental Health Services** 

# Balance and gait exercises

Balance and gait exercises will challenge your balance and vestibular system. By working this system repetitively through exercises, you can improve balance, which improves symptoms of, for example, imbalance, veering when walking, dizziness, visual vertigo.

Your physiotherapist is a highly trained specialist in vestibular and balance disorders. They will perform a thorough assessment. After that, you will be prescribed exercises and it will be up to you to do these exercises at home which will help you take an active part in improving your symptoms and quality of life.

The exercises need to be part of your everyday routine. If you continue to challenge your balance system, it will continue to improve. If you do not practice, it will not improve, and your balance may even deteriorate.

Always challenge your balance in a safe way. This might mean standing in a doorway to balance or using walking poles when out walking. If you are unsure how to make exercise safe, please discuss with your physiotherapist.

Go for a walk every day, for 30 minutes of moderate exertion exercise. Vary your route and try to go into busier places gradually. If you cannot do 30 minutes to start with, start with five or ten minutes and build up each week by five minutes to a maximum of 30 mins to one hr.

You should feel your heart rate increase, get a little sweaty and slightly short of breath but still be able to hold a conversation. This is a normal response to exercise. Try not to hold onto anyone. Look around and target your vision to pick out details on things near and far away. For example, the pattern on leaves and flowers or try to pick out everything that is red on your route.

Notice the beauty in things around you, appreciate and recognise the good things you see in places and people. Try to walk in the daylight. This will help with your vitamin D levels and sleep patterns.

Do not exceed discomfort with symptoms or dizziness and do not trigger headache symptoms with any of the exercises.

#### **Functional balance**

It is very important to make sure you are safe whilst performing these exercises. You may need to lightly hold on to the sink, or do them in the corner of a room. Try to hold each posture for 10 to 30 seconds

- · Stand with your feet together
- Stand heel to toe, left in front of right, and then swap over
- Try to stand on your right leg alone, and then repeat on the left
- Aim to get both sides equal
- Practise standing on your heels, then tiptoe
- This helps prepare you for uneven ground and direction change.

When these are easy, it is important that you continue improving your balance by progressing to a harder exercise, and if you can, do any of the above exercises but at the same time try to

- Move your head left and right targeting your vision at each side.
  Progress to do this while walking
- Turn your head left and right whilst looking straight ahead slowly at first and then faster
- Progress to doing this while walking
- Move your head up and down
- Progress to doing this while walking
- Move your head up and down while looking straight ahead
- Progress to doing this in walking
- Close your eyes while standing still in a safe place
- Stand on a cushion in a safe place
- Close your eyes and move your head right to left or up and down

- Stand on a cushion
- Move your head targeting your vision
- If this is too easy, close your eyes
- Try to do a mental task at the same time such as reading or counting backwards.

If these are becoming easier, progress to even harder exercises by challenging yourself to trying any of the following, but only if you feel safe.

- Throw and catch balls
- Walk forwards, backwards and sideways whilst turning your head
- Put your arms out to the side and turn your head right and left to target spot your thumbs
- You can progress to do this while walking
- Practise turning around, first in a big circle, gradually making smaller circles, until you can turn on the spot
- Practise sitting on a swiss ball, whilst moving your head around
- Push yourself to try any sport you used to enjoy, Tai Chi, badminton or dancing.

Any movement can be an exercise. Specific movements or activities that trigger imbalance or dizziness can be used to improve symptoms. Your body and brain need movement to stay strong and healthy.

Repeat the trigger movement gently at first with low repetitions. Challenge your balance system by increasing the speed and repetitions gradually.

Discuss the trigger movement with your physiotherapist if you would like further advice on how to do this.

# **Visual motor training**

Perform the exercises from ten seconds up to one minute, one to five times a day. The amount you do will be dependent your symptoms, how easily triggered it is, your diagnosis and level of balance.

The exercises should be challenging and may make you moderately dizzy but this should settle in under three minutes.

# **Vestibular Ocular Reflex (VOR) training**

While sitting, standing or walking, look at a target at eye level. You can stand three metres, two metres or one metre away from the target or hold a target at arm's length. The target should stay in focus during head movements.

- Fix your eyes to the target then turn your head quite quickly left to right to left without moving your shoulders.
- 2. Fix your eyes to the target then move your head quite quickly up and down.

You may wish to use a metronome or metronome app to help you keep at the right speed 160 to 240 bpm.

If you can keep the visual target in focus, then increase the speed of movement. However, if the visual target blurs, slow the movement down.

# Smooth pursuit eye tracking training

- 3. Keeping your head static, fix your eyes to the target and then slowly move the target left to right, following it with your eyes.
- 4. Keeping your head static, fix your eyes to the target and then slowly move the target up and down, following it with your eyes.

#### **Vergence training**

- Keep the head still and move the target to and from your nose, keeping the target in focus.
- Hold a ruler about 15 centimetres away from your nose pointing away from you.

Target your vision onto the numbers. Move your vision to target each number reading away from your nose then towards your nose. If this is too difficult start with try two to five centimetres step.

To progress exercises one and two, you can move the target in the opposite direction to your head. These are small movements no bigger than the length of a long ruler.

If you find these exercises easy, then progress the exercises by walking up and down your kitchen or hallway following the instructions above. If you feel able to, you can do them outside varying the surfaces you walk on.

If you have a problem veering or turning to one side you can focus on that side and emphasise or repeat movements to that side from the centre.

Perform all exercises in a safe way and in a safe environment with support close by where possible.

If you feel unsafe performing any of these exercises, stop and consult your physiotherapist.

# **Cervical spine sensory awareness exercises**

- Stand with feet together, eyes closed and arms out to side, thumbs up
- Move head from side to side and occasionally stop to point nose to thumbs, check by opening eyes
- Vary the position of the thumbs or choose objects around the room to line up with

 Look at a target, close your eyes but keep them directed at the target, move your head either right and left or up and down. Stop at a different position to your starting point and open your eyes. Are you still looking at the target?

# Saccades (eye movements)

- Sit in a comfortable position; hold a playing card (eg. king or queen) in each hand, level with your eyes and about 45 centimetres apart
- Keep your head still, move your eyes quickly from one card to the other without stopping in between the cards. Remember to move only your eyes
- As you improve, try to focus on smaller and smaller detail of the face on the card, for example nose, eyes or mouth.

#### **Corrective saccades**

- Hold your thumbs out at arm's length in front and slightly to the side
- Move your eyes only to look at your RIGHT thumb
- Turn your head to face your RIGHT thumb
- Move your eyes only to look at your LEFT thumb
- Turn your head to face your LEFT thumb
- Move your eyes only to look at your RIGHT thumb
- Turn your head to face your RIGHT thumb.

Repeat as many times as you can. You need to do many movement repetitions over time to improve. Practice makes perfect!

## **Sensory balance exercises**

- Stand with your feet together and your eyes closed
- Sit to stand with your eyes closed
- Tandem stance (heel to toe standing for as long as you can)
- Heel toe walking without head turns, progressing to with head turns
- Stand on one leg with or without your eyes closed be safe and alternate legs after 30 seconds
- Stand with feet together and eyes closed +/- head turns
- Turn to look backwards right and left
- Four square step eyes open or closed +/- head turns to look in the direction of travel.

If you cannot do these exercises with your feet together or one in front of the other start with your feet apart and progress by moving them inwards, a little each week.

## Peripheral visual perception exercises

- Look at the target and turn head right and left whilst walking forward and backwards from target
- When standing, look at thumbs and turn 180 or 360 degrees round to right \_\_\_\_ times and left ¬¬¬\_\_\_ times
- Form a soft gaze and try to see what's around you without directly looking at it.

# **General fitness and strength circuit**

Do each exercise for 30 seconds, with 30 seconds rest in between, and continue for 18 minutes.

- Mini squats
- Walking or jogging on the spot
- Lunges
- Sit to stand
- Step on/off block or stairs OR forward and backward stepping
- Sidestepping.

Exercise prescription	Frequency/reps
1.	
2.	
3.	
4.	
Notes	

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If you have any comments, compliments or concerns you can speak with a member of staff or contact our Patient Advice and Liaison Service (PALS) and Complaints Team

Telephone: 0151 471 2377 Freephone: 0800 328 2941

Email: palsandcomplaints@merseycare.nhs.uk

To request this leaflet in an alternative format or language, please speak to a member of staff.

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