

## Sensory training script 8

### **Part Eight Vestibular:**

#### **Slide 1**

Welcome to Part Eight of the Derbyshire Healthcare NHS Foundation Trust's Community Paediatric Occupational Therapy team's Sensory Training for Parents and Carers.

#### **Slide 2:**

Vestibular sense is the awareness of movement and balance.

#### **Slide 3:**

The vestibular receptors are situated in our inner ear. The receptors tell us about the position and angle of our head in relation to the fixed force of gravity. This allow us to be able to reposition our bodies during and after movement.

There are two types of receptors:

One type of receptor informs us about linear movements, such as moving forwards/backwards, up/down, or side-to-side. This sensory feedback tends to be organising and calming to the body. We get this input when we jump on a trampoline, ride a bike, or move with purposeful and rhythmical movements.

This sense is important for enabling us to keep our eyes still whilst we are moving, and this is important when we are learning how to read, enabling us to follow a sentence across a page or on the white board, and to relocate our vision when we are copying from the board to a text

#### **Slide 4:**

The second type of receptor, tells us when our heads are tilted or moving in circular or rotational movements, such as doing gymnastics, handstands, leaning over the arm of a chair, or cockling on two legs of a chair and being wobbly. This receptor is also triggered by fast movements and sudden changes of direction when playing, this sensory feedback is alerting or sometimes disorganising to our sense of well-being. Children can get 'high' with this type of sensory activity.

These receptors can make us feel dizzy when we move, if a child moves a lot but does not feel dizziness, this sense is under-responsive. Some children will be over – responsive to movement and avoid it.

#### **Slide 5:**

Smooth, regular rhythmical movements are calming, such as slow rocking, or swinging.(show)

Slow movements alongside 'heavy work' proprioception activities are also always calming and organising.

### **Slide 6: Row the boat**

Here we see Mum and son playing row the boat, Mum controls the speed of the movement to keep it predictable and steady for calming, or if needing to alert her son, she can use movements that are less predictable and of different force and speed. In this photo, Mum is using the pull through her arms to give some proprioceptive feedback to calm and organise her sons responses to the movement. She could add more proprioception if her legs were laying over her sons legs.

For older children this type of activity can be done using theraband or by using gym equipment such as rowing machines or stair climbers.

### **Slide 7 rolling over a gym ball:**

Here we see the son rolling over a gym ball to place pieces of the puzzle, Mum is close to make sure movements don't become over fast which will disorganise him. His wide leg position shows that there is movement and control. He is taking weight through his right hand and this is providing proprioception which will help to organise and calm.

### **Slide 8 Bouncing:**

Here we see the son, bouncing on the gym ball, he is maintaining a steady bounce pace, and Mum is helping to keep this regular by giving instructions to 'go' or 'stop'.

This activity might need to be followed by proprioceptive heavy work to keep the son well organised.

Bouncing can also take place on a trampoline.

### **Slide 9 Techniques Caution:**

Monitor and be vigilant:

You will need to monitor responses of children during vestibular activity. Children's ability to organise activity can change quickly, too much and the child can become over stimulated quickly and then behaviour becomes chaotic. Be vigilant and control the amount of movement activity your child does at any time, use the techniques in Tactile touch and Proprioception parts 2 and 7 of this training to support your child to be more organised. Time limit activity to get the best fit for your child.

### **Slide 10: Introducing new Techniques**

Introduce any new technique at a quiet time for your child.

If your child is able to understand, talk about the plan and agree how to practise this.

Many techniques will need to be familiar before the child can respond by calming.

**Slide 11: End of Part Eight**

Please go to Part Nine: Interoception. If you do not need any other senses information, please see the sensory day section.