

FND Movement Toolbox

How functional movement symptoms develop

Current models by experts in FND, suggest that symptoms arise when a triggering event occurs within the context of pre-existing vulnerability factors and an increased fight or flight state. The nervous system receives novel sensory data during the triggering event, for example tingling and pain, the body and brain enter a high alert state, and the brain subconsciously places increased attention and expectation on this new sensory experience, leading to symptoms. These symptoms are then reinforced by changes in behaviour, for example reducing activity and using walking aids, and layers of secondary symptoms, for example fatigue from deconditioning and pain from abnormal postures, tension and central sensitisation, leading to disability.

How specialist physiotherapy can help functional movement symptoms

The physio techniques used to help functional movement symptoms are very different to those used in general muscular-skeletal physiotherapy. Healing movements and therapeutic strategies aim to increase normal sensory feedback, access automatic muscle activity, strengthen normal movement pathways whilst reducing the conditioned response of abnormal movements, calm the fight or flight response, reduce the engagement of unnecessary muscle groups, re-focus attention, reinforce helpful position/posture, and reduce secondary symptoms.

Strategies for Specific Symptoms/Difficulties

| Symptom/Difficulty | Strategy |
|--|--|
| Foot spasming when seated | Ground feet on floor/wedged blanket etc. lift knees/heels up and down Breathe |
| Foot spasming when standing | Forward and backward heel rocking Breathe |
| Hand curling | Place hand palm open on leg, slide up and down Place hands palms together, move them fluidly Breathe |
| Twist/spasm from trunk when sitting | Seated side to side weight shifting Breathe |
| Twist/spasm from trunk when standing/walking | Open from hip if leg stuck in twisted position Get legs back under hips Heel toe rocking, starting with one leg if necessary Breathe |
| Twist/spasm from trunk when turning around whilst standing | Walk the turn in little steps Breathe |
| Spasms when lying down | Use on/off movements starting around the core/ pelvis/hips Gentle knee rolls (help with position of legs first, if necessary) Shoulder rolls Breathe |

| Symptom/Difficulty | Strategy |
|--|---|
| Tension whilst seated | Pelvic tilts, side to side movement, roll and relax shoulders, breathe |
| Tension whilst lying down/sleeping | Increase surface area body can relax into - lie on side, pillow between legs, pillow to hug, rolled towel/pillow under neck |
| Tension when getting up in the morning | Yoga stretches, hip roll, bridge, knees to chest, neck side to side, move shoulders |
| Standing up | Set up - symmetrical position, bottom to front of seat, feet neutrally aligned, centre of gravity (chest) forward over knees and up 'Forward and up' |
| Sitting down | Set up - symmetrical position, back evenly to chair, bottom back, centre of gravity (chest) forward |
| Difficulty getting out of bed | Roll onto side, swing legs round, push up to sitting |
| Getting down onto the floor | Turn facing chair, hands on chair seat, knees down one by one, lower bottom onto knees, sit to side, lie down on side, roll onto back |
| Getting up off the the floor | Roll onto side, sit up onto knees, hands on chair seat, lift bottom up from knees, legs up one by one, push up to standing |
| Minimal movement to work with during paralysis episode | Start with breath |
| Paralysis in one upper limb | Assisted movement |
| General loss of movement | Work in front of mirror |
| Foot dragging/toes not lifting | Forward and backward heel toe rocking Shift centre of gravity back slightly over heels |
| Foot turning in | Exaggerate outwards position of feet |
| Straight/stiff legs | Soften knees Reduce use of crutches |
| Difficulty walking unaided | Hold hands with another person who walks backwards, encourages side to side movement and provides momentum |
| Loss of momentum/hesitating when walking | Use 'techniques in motion' Side to side weight shifting focusing on centre of gravity in chest Music Treadmill Holding hands with someone who walks backwards, encourages side to side movement and provides momentum |
| Depersonalisation when walking | Count steps - 1, 2, 1, 2 - left, right, left, right Notice feet moving forward, body moving side to side Breathe |

Daily Activities to incorporate Movement Work

| Activity | Strategy |
|---|---|
| Brushing teeth | Sit to stand Supported standing Side to side weight shifting Forward and backward heel toe rocking |
| Food preparation | Supported standing Side to side weight shifting Tiny steps from the side to side movement using kitchen work top if necessary Turning around in little steps |
| Washing up | Supported standing Side to side weight shifting Assisted upper limb movement |
| Cleaning work tops | Supported standing Side to side weight shifting Tiny steps from the side to side movement Assisted upper limb movement Turning around in little steps |
| Drinking from a cup | Assisted upper limb movement |
| Washing body | Assisted upper limb movement |
| Transferring from wheelchair to another chair | Sit to stand/stand to sit |
| Yoga/meditation | Get down onto and back up off the floor |
| Sitting in wheelchair/dining chair | Turn feet outwards |
| Using power wheelchair | Place hand around the wheelchair control (rather than curled under) |
| Walking outside | Use 'techniques in motion' establishing a flowing, natural stride over different surfaces |