Helpful Tips for the Unsteady Patient

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AIMS

- Brief discussion of Causes & Implications of Unsteady Gait/Imbalance
- Falls & Falls Prevention
- Significant Observations (identifying ‘at risk’ patients)
- What can we do to help?
Gait & Balance disorders..

- Are among the most common causes of falls in older adults
- Often lead to injury, disability, loss of independence, & limited quality of life
- Usually multifactorial in origin & require a comprehensive assessment to determine contributing factors & targeted interventions
Most changes in gait in older adults are related to underlying medical conditions, particularly as conditions increase in severity, & should not be viewed as merely an inevitable consequence of aging.

In the US at least 30% of people ≥ 65 years report difficulty walking three city blocks or climbing one flight of stairs & approximately 20% require the use of a mobility aid to ambulate. (CENTERS FOR DISEASE CONTROL AND PREVENTION 2009)
Causes of Imbalance?

- Fear of Falling
- Peripheral neuropathy
- Parkinson’s/Parkinsonism
- MS
- Cerebellar dysfunction or degeneration
- Vestibular Impairment
- Orthostatic Hypotension
- Depression
Risk Factors for Falls

- Age >80
- Female gender
- Low weight
- A history of fall in the previous year
- Medication - psychotropics (esp benzodiazepines, antidepressants, antipsychotics), BP lowering drugs, & anticonvulsants
- Polypharmacy - a 14% ↑ in fall risk in one study with the addition of each medication beyond a four-medication regime, irrespective of the group of drugs studied
Risk Factors for Falls

NICE Guidelines, 2013

- Alcohol abuse
- Diabetes mellitus
- Confusion and cognitive impairment
- Disturbed vision
- Urinary incontinence
- Muscle weakness
- Inappropriate footwear
- Environmental factors including home hazards
Implications of Imbalance?

- Patient disempowerment
- Falls
- Fear of Falling
- Poor quality of life
- Complications of Immobility (osteoporosis, pressure sores, constipation, muscle wasting etc..)
Falls

- Approximately 1 in 3 people over the age of 65 fall every year. 45% over 85
- Injuries due to falls are the most common cause of mortality in people aged over 75 in the UK
- The best predictor of falling is a previous fall
Falls Prevention – in the Home

Floors

- Flooring Type
- Maintain a Clear walkway - Remove unnecessary furniture
- Remove loose rugs or use non-slip tape to stop them sliding
- Deep pile rugs are more risky than slimmer ones
- Coil or tape loose cords or wires next to the wall
SAFE ENVIRONMENT AT HOME

Stairs

- Light switch at top & bottom of the stairs
- Geometric patterns on stair carpets may make it more difficult to judge the step height. Mark the last step with contrasting tape to distinguish it from the floor
- Consider fitting an extra bannister
- No dual tasking
Safe environment

Bathroom

- Use of non-slip mats both in the bath/shower & on the floor
- Grab rails in the shower/bath & by the toilet & shower seats may also be helpful
Footwear

- Inappropriate footwear, inc. shoes with high heels, narrow heels, slip-on shoes & worn slippers have been implicated as a contributing factor in up to 50% of falls.

- Main factors affecting postural stability are; heel height, cushioning properties of midsole & the slip resistance of the outer sole.

- High heels may contribute to instability & falling by affecting the position of the centre of mass & by altering the position of the foot when walking. Heel elevation may make the wearer more susceptible to falling backward.
Footwear – Advice to give patient

- Avoid wearing shoes with very soft soles, thick soft midsoles reduce sensory feedback & stability
- Look for a thin, firm midsole
- Accidental falls caused by slipping are common—over 1 million injuries caused by slipping treated in the UK every year
- Look for sole that provides a good grip – textured sole eg. linear grooves
GETTING UP FROM THE FLOOR

- Roll onto your side
- Crawl or drag yourself over to chair/table/step
- From a kneeling position, put your arms up onto the seat of the chair
- Bring one knee forward and put that foot on the floor
- Push up with your arms and legs, pivot your bottom around

- Sit down. Rest before trying to move. Rest at any time, and if you do not succeed the first time, rest and try again
SAFETY ON THE FLOOR

- If unable to get up advise patient to
  - Not panic
  - Raise the alarm- using a phone or pendant alarm (many different types of personal alarm systems available)
  - Stay warm. Use coats or blanks that are to hand to keep warm
  - Gently move around to stop one part of the body getting too much pressure & to maintain blood flow
Significant observations – who is ‘at risk’

- Difficulty rising from a chair
- Shuffling gait which may suggest Parkinsonism
- Balance - do they veer off course? This suggests cerebellar dysfunction
- Rate of walking (TUG)
- Nature of steps - look for a high steppage gait due to foot drop
- Difficulty turning
- Widened base
- Facial Bruising
How can we help?

- Encourage patients to keep active
- Advise patient to consult (where appropriate) with Parkinson’s Association, MS Societys’ “Getting the Balance Right” Programme, GP Exercise Referral scheme
- Referral to Physiotherapy or OT for review/exercise programmes/advice/issue of aids
- Cues are very helpful for Parkinsons patients – these can be verbal, auditory or visual
Visual cues for PD

Use Cues
Bed Mobility & Transfers

Problems
- Stiffness in limbs & trunk
- Bradykinesia
- Freezing
- Posture

Strategies
- Break down movement into steps
- Cuing strategy – ready, steady, stand – rocking for momentum
- Higher chair with arms
- Bed levers
- Take meds before getting up
- OT involvement
Break Down of Movement Task During Transfer Practice (Strategies for Complex Movement Sequences)

**STS Practise**

- Shuffle forward in the seat.
- Keep feet back.
- Lean trunk forwards.
- Push up with the hands.
- Stand up straight and tall.
Breakdown sequences
Avoid Dual Tasks
STAYING ACTIVE

- Research has shown exercise can help reduce falls in older people, through increasing LL strength, & by improving balance. It can also reduce the risk of osteoporosis.
- Exercise programs may target strength, balance, flexibility, or endurance. A Cochrane review found that programs containing two or more of these components reduce the rate of falls and number of persons falling.
Guidelines for older people (aged 65 +)

The National Guidelines on Physical Activity for Ireland

- At least 30 minutes a day of moderate intensity activity on five days a week, or 150 minutes a week. Focus on aerobic activity, muscle-strengthening and balance.
- Or do shorter bouts of activity lasting at least 10 minutes. Add activities which increase muscular strength & balance on 2 – 3 days per week to reduce risk of falls.
Choose physical activities that you enjoy to maximise your chances of staying active.
Start slowly and set goals to increase your chance of success.
“What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?”
Questions....