

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/Parkinsonisms
- MS
- Cerebellar dysfunction or degeneration
- Vestibular Impairment
- Orthostatic Hypotension
- Depression

Risk Factors for Falls

NICE Guidelines , 2013

- 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

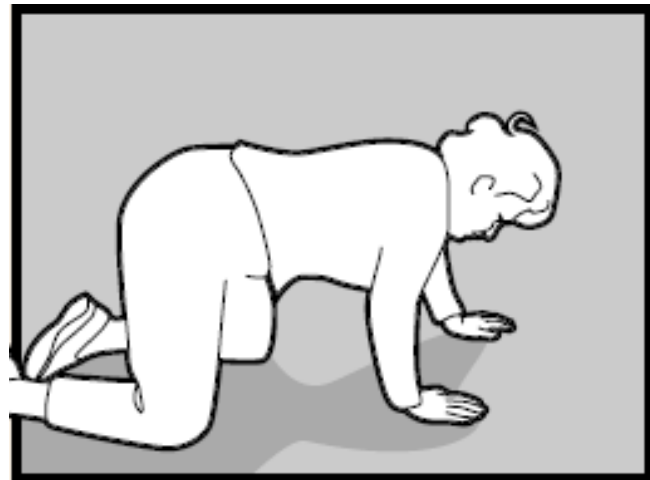
- Avoid wearing shoes with v soft soles, thick soft midsoles reduce sensory feedback & stability
- Look for a thin, firm midsole
- Accidental falls caused by slipping are common-over 1 million injuries caused by slipping treated in UK every year
- Look for sole that provides a good grip – textured sole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

GETTING UP FROM THE FLOOR

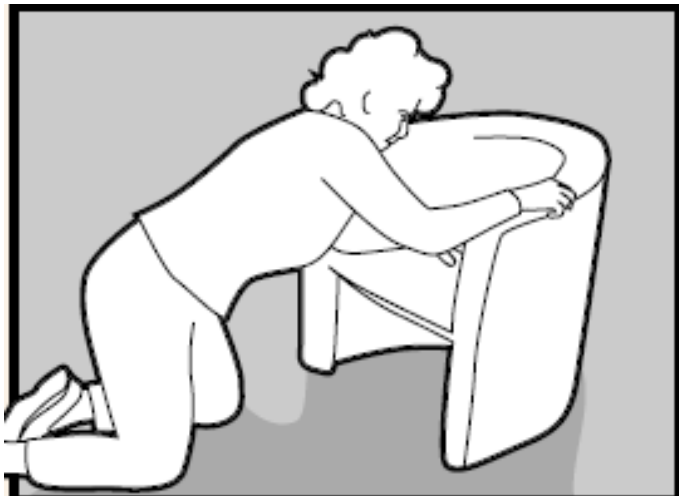
- Roll onto your side



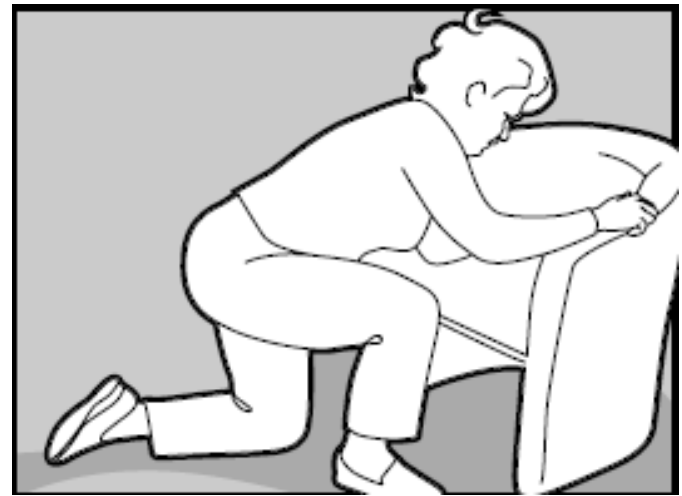
- Crawl or drag yourself over to chair/table/step



- From a kneeling position, put your arms up onto the seat of the chair



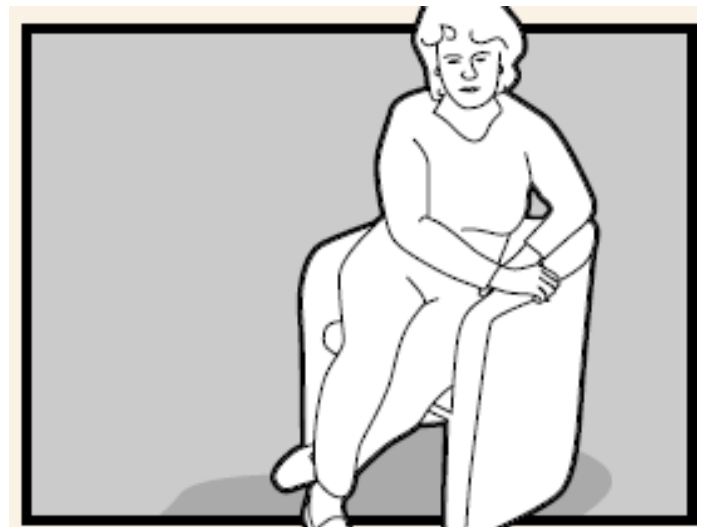
- Bring one knee forward and put that foot on the floor



- 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 blankets 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

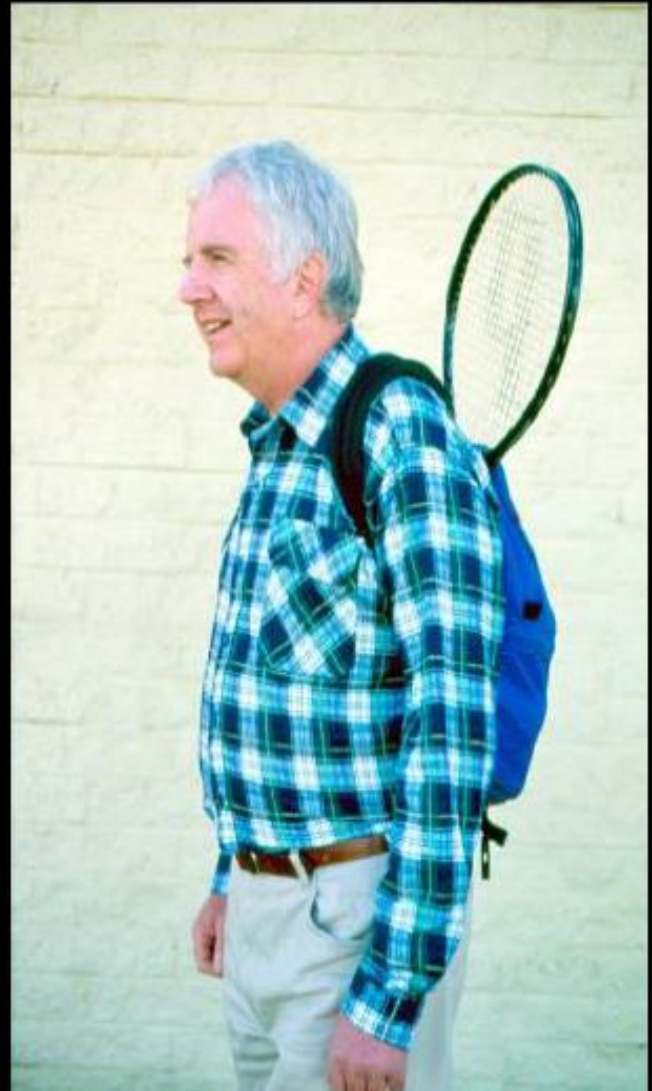


- Shuffle forward in the seat.
- Keep feet back.
- Lean trunk forwards.
- Push up with the hands.
- Stand up straight and tall.

Breakdown sequences



Avoid Dual Tasks



STAYING ACTIVE

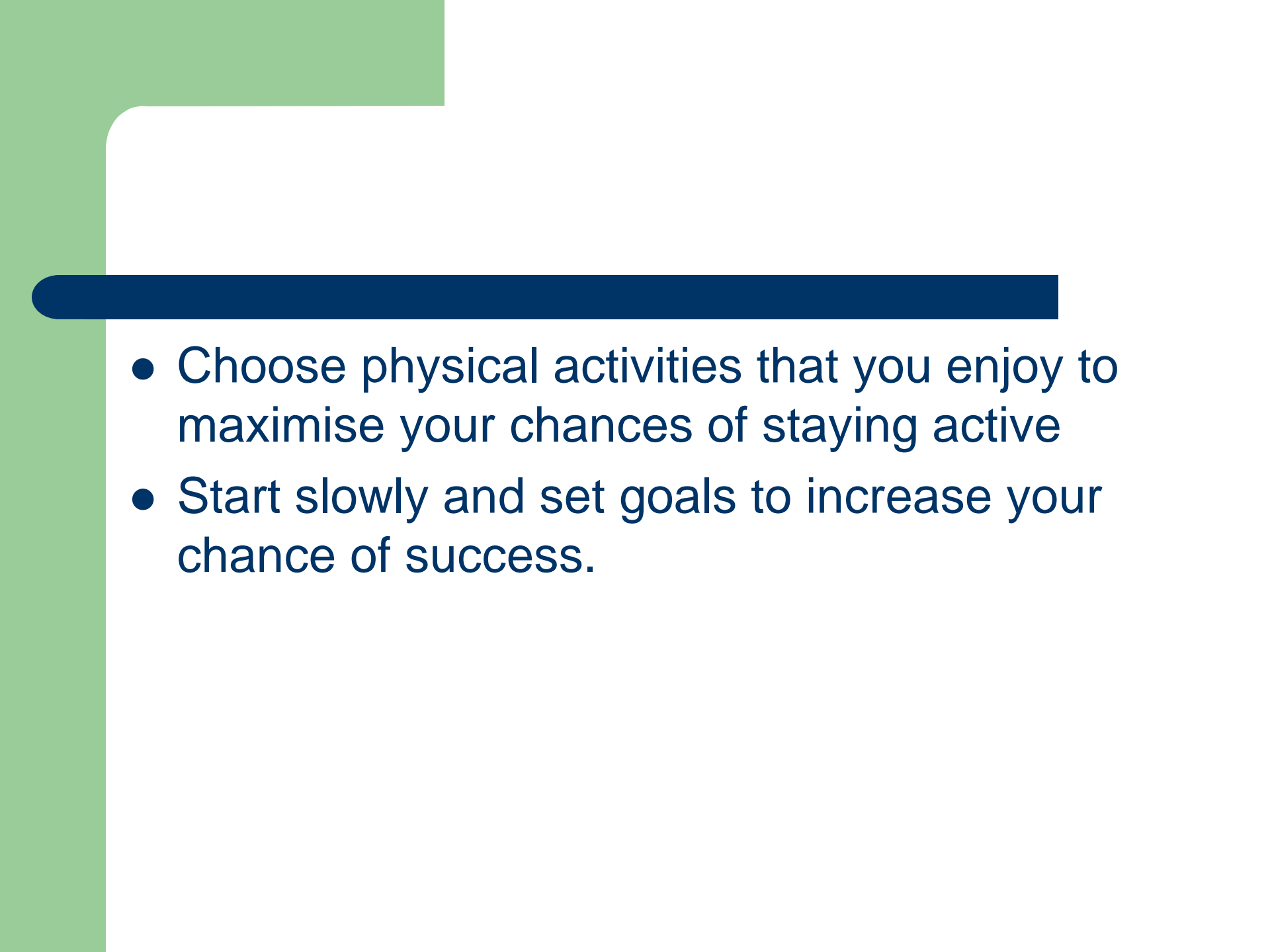
- Research has shown exercise can help reduce falls in older people, through increasing LL strength, & by improving balance. It can also reduce the risk of osteoporosis
- Exercise programs may target strength, balance, flexibility, or endurance. A Cochrane review found that programs containing two or 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.

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- 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....

