Preventing Falls

Jane Youde
Post Take Ward Round

- 85 year woman who has been admitted from ED after failing a mobility assessment in ED
- She presented after falling for the third time in a week
- She has a fractured pubic ramus on x-ray
What can you do?

- Prescribe trimethoprim?
- Try to refer to orthopaedics?
- Have a go at CGA yourself?
What you can do

- Patients with Osteoporotic pelvic fractures have similar mortality rates to hip fracture patients
- Admission to hospital does not reduce the risk of falls
- Falls are common ways of older people with frailty first coming to medical attention
Falls and Syncope in Older People

• Fall:

  • An event which results in a person coming to rest inadvertently at a lower level
Falls and Syncope in Older People

• Syncope:

• A transient loss of consciousness, characterised by unresponsiveness and loss of postural tone with spontaneous recovery
Falls in the Elderly

- 30% of cognitively intact older people are unable to recall documented falls 3 months after the event
- Eye witness accounts of falls are often unavailable
- Amnesia for a loss of consciousness is present in up to 50% of patients with syncope
Intrinsic Factors

• Balance and Gait
• > 4 medications
• Visual impairment
• Cognitive problems
• Postural hypotension and Cardiovascular causes
• Incontinence
Falls in the Elderly

- Full history
- First fall/multiple falls
- Eye witness account
- Associated features
- Risk Factors for falling
- Drug History
- Alcohol Intake
Falls in the Elderly

- Examination
- General
- Postural BP
- Heart Sounds
- Neurological Examination
- NB Eye Sight!!!
Causes of Falls

• Associated with physiological ageing
  – E.g. impaired response times, impaired muscular strength

• Multi-factorial

• Multi-disciplinary
Cardiovascular Causes of Falls in Older People

- Causes:
  - Orthostatic Hypotension (OH)
  - Postprandial Hypotension
  - Carotid Sinus Syndrome
  - Neurocardiogenic Syncope
  - Arrhythmias
  - Structural Heart Disease
Gait and Balance

- Stroke Disease
- Parkinsonism
- Arthritic Changes
- Neuropathy
- Muscle Disease
- Vestibular Disease
Falls and Medication

• Taking more than 4 medications increases the risk of falls
• Medication is often incorrectly used
• High risk medication include sedatives
• Consider using STOPP/START audit tools and guidance for this
Cognitive Impairment

- Any form of dementia is associated with an increase in falls

- If the cognitive impairment is advanced these patient do not normally benefit from rehabilitation
Visual Impairment

• Common with increased age

• Bi-focals and varifocals increase the risk of falling

• Glaucoma, macular degeneration and retinopathy increase the risk
Continence

• Urgency and frequency symptoms need assessing

• Full continence assessment
Extrinsic Factors
Extrinsic Factors
Extrinsic Factors
Extrinsic Factors
Falls in the Elderly

• Management

• Remember multi-factorial

• Review drug regime
Falls in the Elderly

- Regular Exercise
- Assessment and Treatment for osteoporosis
- Review especially to monitor medication and ongoing medical problems
- Environmental Issues
Falls in Older People

• MULTIFACTORIAL

• MULTIDISCIPLINARY

• POLYPHARMACY
Falls

• You can review the medication
• Decide if there is evidence of syncope
• Consider if they are at risk of frailty
• Check their vision and cognition
• Review their bone health
• Avoid exposure to unnecessary treatment
• Refer to an MDT
Falls

• Look at your trust reports from the National Hip Fracture Data Base and the National In-Patient Falls Audit

• Consider completing CareFall e-learning module
Osteoporosis

• Progressive systemic skeletal disease characterised by low bone mass and microarchitectural deterioration of bone tissue
• Consequent increase in fragility and therefore fracture
• WHO: T-score <2.5 SD below young adult mean
Assessment and Treatment of Osteoporosis

• NICE Guidance for secondary fracture prevention is available
• Different assessment web based tools are available e.g. FRAX
• Locally based guidance should be referred to
References

• STOPP/START criteria for potentially inappropriate prescribing in older people: version 2 O’Mahony et al Age and Ageing 2015;44:213-218

• Admission for osteoporotic fractures and predictors of length of hospital stay, mortality and loss of independence Marrinan et al Age and Ageing 2014;44:258-261