The use of DEXA in hip fracture patients with a history of previous fragility fracture: a retrospective study

Elisabeth Bell, Robin Proctor
University Hospitals of Morecambe Bay NHS Foundation Trust

Background to the audit

Osteoporosis is under-diagnosed and under-treated, with secondary prevention of fracture widely neglected. Sustaining a fragility fracture can double the risk of future fractures. Over 40% of people who sustain hip fracture have had a previous non-hip fragility fracture.

Ageing population - In England the number people aged >65 due to rise by a third by 2025. In the same period the number of people over 80 will double.

- Mid 1980’s: 46000 hip fractures annually in the UK
- 2012-2013: 85000 hip fractures
- 2036: predicted 140000 hip fractures (an increase of 65% from 2012-13)

Standards

The British Orthopaedic Association ‘The Care of Patients with Fragility Fracture’ Standard 5 states that all patients presenting with fragility fracture should be assessed to determine their need for anti-resorptive therapy to prevent future osteoporotic fractures.

All patients aged ≥50 years presenting to hospital with fragility fractures should undergo assessment for osteoporosis by axial bone densitometry. Targeting treatments at patients who have been confirmed to have osteoporosis has been shown to halve the risk of further fracture at all skeletal sites, including fractures of the hip

Aim

The aim of the audit was to identify the number of hip fracture patients, with a history of previous fragility fracture, who received a DEXA referral before suffering a hip fracture.

Method

- Using data collected from the National Hip Fracture Database, 100 consecutive hip fracture patients across the Trust were identified.
- Patients with a previous fragility fracture identified on the Radiology Information System. This was substantiated by the radiological report.
- Exclusion criteria - patient does not live locally (therefore, no previous medical history), trauma, pathological fracture.
- The electronic patient record of all patients with a confirmed fragility fracture was accessed to ascertain whether a DEXA referral had been made.

Results of 1st audit round

The audit showed only 15% of patients had a prior DEXA scan, suggesting that the Trust was not adequately screening patients for osteoporosis.

Action plan

Patient's of 50+ years of age that have sustained a fragility fracture should be identified by an Advanced Nurse Practitioner in Osteoporotic care. This should be done using fracture clinic lists and radiology reports for non-acute presentations from GP referrals (i.e. vertebral collapse). Osteoporosis nurse to make DEXA request for all identified fragility fracture patients.

References

British Orthopaedic Association Standards for Trauma (BOAST) 9: Fracture Liaison Services