Pathway for Vertebral Fragility Fractures—Primary Care

Vertebral Fragility Fracture (VFF)

Key Risk Factors:

Older age (>50 years for women and >65 years for men)

Previous fragility facture

Long term glucocorticoids

History of falls

Family history of hip fracture

Other causes of secondary OP, e.g., RA & problems with malabsorption

Low body mass (<18.5kg/m2)

Smoking

Alcohol intake >3.5 units /day

Full overview- SIGN142 Osteoporosis

History:

Sudden pain in thoracic or lumbar spine

Minimal trauma

Pain that gets worse when sitting (esp a straight-backed chair) & leaning backwards

Standing leaning forwards

Physical Examination:

No clinical signs specific for VFF

In acute phase may have: Local tenderness / pain on percussion over spine level

Potential for: Height loss of person > 2.5cm

Thoracic Kyphosis

Why is it important to identify a VFF:

- A vertebral fracture is a powerful predictor of another vertebral fracture (5x more likely) & of future hip fracture (3x more likely) without treatment (ROS, 2021).
- There are high rates of mortality within the first year after fragility fractures such as the hip (The Vertebral Fractures Study, 2022).
- All patients with a VFF should be considered for fracture risk assessment to reduce fracture risk and prevent further fractures (ROS, 2022).

Conservative Management Considerations::

- VFF can be an incidental finding & up to 2/3 patients do not present with severe symptoms, with pain typically resolving in 4 to 6 months.
- If symptomatic, prolonged immobility should be avoided and analgesia as appropriate to aid early mobilisation.
- Signpost to information on resources and support- ROS Spinal Fractures Information & Support
- Consider referral to physiotherapy with recommendation on Strong, Steady and Straight exercises (ROS, 2019). (Further details see reference 7)
- Consider falls assessment with referral to falls prevention service where appropriate.
- Persistent pain consider referral to pain clinic.

1. Spinal pain and suspicion over VFF:

X-ray (AP and Lateral Views)

Separate Thoracic & Lumbar spine X-ray

Highlight concern about VFF

No fracture identified:

- Safety Netting
- Trial of conservative management
- Consider differential diagnosis and MRI imaging if severe pain not responding to conservative care.

Known history of Osteoporosis and new/ recent Vertebral fracture confirmed:

- GP to assess fracture risk with QRISK or FRAX, urgent DEXA request (via medical physics open access), consider commencement of Osteoporosis medication.

Further information available at – Refhelp (Rheumatology and Bone Disease- Osteoporosis)

If the patient had a recent DEXA scan (less than 2 years) or has sustained a new facture whilst on OP treatment liaise with metabolic bone clinic (rheumatology) for further advice.

Osteoporosis– Fractures while on treatment— Osteoporosis – Fractures while on Treatment – RefHelp (nhslothian.scot)

Unknown history of Osteoporosis and new/ recent Vertebral fracture confirmed, and:

- Work up for osteoporosis including urgent DEXA and blood tests to exclude secondary causes of Osteoporosis.

2. Nerve root pain (with or without spinal pain) and suspicion over VFF:

If there is nerve root pain in the absence of neurological signs, then in **addition to the above**, consider managing the nerve root pain as per routine nerve root pain guidance in lumbar spine pathway

More information available Refhelp- (NHS Lothian Integrated Spinal Service (scot.nhs.uk)

3. Red flag concerns/ Neurological changes and suspicion / confirmed VFF:

Discuss with **on-call Neurosurgical team**, **RIE via switchboard 0131 537 1000**

4. VFF suspected & patient has cancer (or strongly suspected) or is under follow up from a previous cancer:

Contact the **Acute Oncology team** at the Edinburgh Cancer Centre on 07798774842 or 0131 537 1000 and ask to speak to Acute Oncology team for oncology

Malignant Spinal Cord Compression—RefHelp (nhslothian.scot)

Created in conjunction with expert opinion from Rheumatology and Neurosurgery

References:1) Clinical Guidance for the effective identification of vertebral fractures. National Osteoporosis Society. 2017. 2) State of the nation report: Vertebral fracture identification in 2021. Royal Osteoporosis Society. 3) Guidance for the management of symptomatic vertebral fragility fractures. Royal Osteoporosis Society. 2022. 4) The Vertebral Fractures Study. A guide to diagnosis for healthcare professional in primary care. 2022. 5) Osteoporotic spinal compression fractures. BMJ Best Practice. 2019. 6) Management of osteoporosis and the prevention of fragility fractures, SIGN 142 Guidelines. 7) Brooke-Wavell et al (2022) Strong, steady and straight: UK consensus statement on physical activity and exercise for osteoporosis. BJSM. 56:837–846.