# **Referral pathways for fragility fractures.**

### **Pathway was written based on current evidence in agreement in the Newcastle Upon Tyne integrated spinal service (Nov 2021)**

Vertebral fragility fractures are the most common osteoporotic fracture (1). These injuries are caused by low energy trauma to the sacral, thoracic or lumbar spine. In the vast majority of circumstances patients aged 65 years and over are managed conservatively and without specialist intervention or review (2,3).

Treatment is adequate analgesia, early mobilisation and management of underlying risk factor such as Osteoporosis (3,4).

## **These should not be referred acutely to the spinal service.**

Patients should be given the patient information booklet on spinal fragility fractures and a discharge summary of their attendance ***highlighting the diagnosis of spinal fragility fracture sent to their GP to investigate potential underlying causes.***

Referral should only be considered if there has been a change in neurological status or severe pain with immobility continues after a period of adequate analgesia.

If continued pain limiting day to day activities after 3 months then the patient can be referred electively as an outpatient for consideration of vertebral augmentation (vertebroplasty) but there is controversy surrounding this treatment(5).

**References:**

1. O’Neill TW, Felsenberg D, Varlow J, Cooper C, Kanis JA, Silman AJ (1996) The prevalence of vertebral deformity in European men and women: the European Vertebral Osteoporosis Study. J Bone Miner Res 11(7):1010–1018
2. T. Ong, O. Sahota, J. R. F. Gladman The Nottingham Spinal Health (NoSH) Study: a cohort study of patients hospitalised with vertebral fragility fractures Osteoporosis International (2020) 31:363–370
3. Daniela Alexandru, MD; William So, MD Evaluation and Management of Vertebral Compression Fractures. Perm J 2012 Fall;16(4):46-51
4. [Joshua A Hirsch](https://pubmed.ncbi.nlm.nih.gov/?term=Hirsch+JA&cauthor_id=30096377), [Douglas P Beall](https://pubmed.ncbi.nlm.nih.gov/?term=Beall+DP&cauthor_id=30096377), [M Renée Chambers](https://pubmed.ncbi.nlm.nih.gov/?term=Chambers+MR&cauthor_id=30096377), [Thomas G Andreshak](https://pubmed.ncbi.nlm.nih.gov/?term=Andreshak+TG&cauthor_id=30096377), [Allan L Brook](https://pubmed.ncbi.nlm.nih.gov/?term=Brook+AL&cauthor_id=30096377), [Brian M Bruel](https://pubmed.ncbi.nlm.nih.gov/?term=Bruel+BM&cauthor_id=30096377), [H Gordon Deen](https://pubmed.ncbi.nlm.nih.gov/?term=Deen+HG&cauthor_id=30096377), [Peter C Gerszten](https://pubmed.ncbi.nlm.nih.gov/?term=Gerszten+PC&cauthor_id=30096377), [D Scott Kreiner](https://pubmed.ncbi.nlm.nih.gov/?term=Kreiner+DS&cauthor_id=30096377), [Charles A Sansur](https://pubmed.ncbi.nlm.nih.gov/?term=Sansur+CA&cauthor_id=30096377), [Sean M Tutton](https://pubmed.ncbi.nlm.nih.gov/?term=Tutton+SM&cauthor_id=30096377), [Peter van der Meer](https://pubmed.ncbi.nlm.nih.gov/?term=van+der+Meer+P&cauthor_id=30096377), [Herman J Stoevelaar](https://pubmed.ncbi.nlm.nih.gov/?term=Stoevelaar+HJ&cauthor_id=30096377) Management of vertebral fragility fractures: a clinical care pathway developed by a multispecialty panel using the RAND/UCLA Appropriateness Method, Spine J 2018 Nov;18 (11): 2152-2161
5. Firanescu, C.E.; de Vries, J.; Lodder, P.; Venmans, A.; Schoemaker, M.C.; Smeets, A.J.; Donga, E.; Juttmann, J.R.; Klazen, C.A.H.; Elgersma, O.E.H.; Jansen, F.H.; Tielbeek, A.V.; Boukrab, I.; Schonenberg, K.; van Rooij, W.J.J.; Hirsch, J.A.; Lohle, P.N.M. Vertebroplasty versus sham procedure for painful acute osteoporotic vertebral compression fractures (VERTOS IV). BMJ 2018;361:k1551 | doi: 10.1136/bmj.k1551