



## AB122. 45. Opportunistic screening for vertebral fractures in a hip fracture population

Michael Kelly, John Carey, Stephen Kearns, John McCabe

Department of Orthopaedic, University Hospital Galway, Galway, Ireland

**Background:** Osteoporotic vertebral fractures have significant consequences for the patient including disability and increased mortality. One vertebral fracture increases the risk of a further fracture by 20% in year one alone. These events are an opportunity to diagnose osteoporosis and instigate treatment, yet as few as one third present clinically.

**Methods:** We undertook an opportunistic screening of hip fracture patients using available CT pulmonary angiogram (CTPA) imaging to assess the effect of these fractures on this population. Prospective database of all hip fractures admitted between 2010 and 2017 was utilised for this study. A consultant musculoskeletal radiologist reviewed all

available CTPA scans for the presence of vertebral fractures. The number of fractures, grade and location was recorded in a database that also included length of stay (LOS), gender and mortality. Results were analysed using SPSS Version 22. **Results:** A total of 225 hip fracture patients had a CTPA available for analysis: 70% of patients were female (n=158). Median age was 80 (range, 30–102) years. Median LOS was 16 (range, 1–301) days; 40% of patients (n=90) had a vertebral fracture present on CTPA; 44 patients had more than one fracture. Only 22% (n=20) of those fractures were reported in the official radiology report. Linear regression analysis revealed an independent association between the presence of vertebral fractures and increased LOS for hip fracture patients (P=0.018).

**Conclusions:** A high proportion of hip fracture patients have concomitant vertebral fractures. Patients with vertebral fractures have an increased LOS for hip fracture treatment. Improved recognition of vertebral fractures on CTPA's represents an opportunity to diagnose and treat osteoporosis.

**Keywords:** Osteoporosis; vertebral fractures

doi: 10.21037/map.2019.AB122

**Cite this abstract as:** Kelly M, Carey J, Kearns S, McCabe J. Opportunistic screening for vertebral fractures in a hip fracture population. *Mesentery Peritoneum* 2019;3:AB122.