

# Bone Disease in People Living With HIV: An Audit of Tertiary Centre Outpatient Assessment

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## Background

People Living With HIV (PLWH) are more likely to suffer from osteopenia, osteoporosis and low impact fracture than the general population. As such it is important for providers of HIV care to identify modifiable risk factors and treat where appropriate.

#### Methods

This was a retrospective review of 64 charts of PLWH who attended the Outpatient Department over a two week period. It looked at identifiable risk factors for bone disease as per EACS guidelines, including:

- post-menopausal women,
- men over the age of 50 years,
  - >20% FRAX score,
- history of low impact fracture,
- prolonged course of steroids etc.

This audit also evaluated whether FRAX scores had been calculated in patients over 40, Vitamin D levels checked in at risk patients, DEXA scans ordered and treatment (with either vitamin D or bisphosphonates) initiated where appropriate.

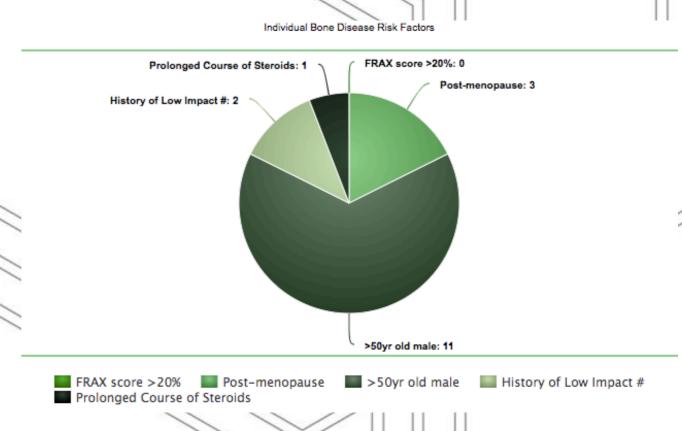
### Results

Of the 64 patients, 36 (56.25%) were eligible for FRAX assessment of fracture risk. 1 other patient was under the age of 40 but had a classic risk factor that warranted DEXA. No patients had a FRAX score documented in the past 2 years. No patients were assessed for falls risk.

Of those 36 patients, 16 had 1 or more classic risk factors that warranted DEXA; 3 patients were postmenopausal women, 11 were men age 50 years or older, 3 had a history of low impact fractures, and 1 patient was on long term steroids (minimum of 5mg, and for longer than 3 months).

Of the 17 patients who warranted DEXA scanning only 2(7.6%) had a scan performed in the last two years. This was influenced by lack of availability to DEXA scanning due to the COVID-19 pandemic. No patients were on bisphosphonate therapy.

Of the 64 patients, 20 had serum vitamin D checked in the prior 2 years. 2 were identified as deficient, and both patients were on replacement therapy.



#### Conclusions

Bone disease in PLWH is under assessed, and scoring tools such as FRAX underestimate those who warrant DEXA. It is important for HIV clinicians to both utilise screening tools and to identify individual patient risk factors for bone disease as part of routine HIV care. Busy clinics may focus on acute issues, leaving chronic risk factor management overlooked, particularly during the COVID19 pandemic, where services prioritised aRT supply, management of opportunistic infection, and viral suppression etc. Use of a template or proforma for secondary risks in HIV clinic may help increase the number of assessments, streamline the evaluation and use of scoring tools, and help reduce cognitive burden on the clinician.