

3.21 Managing Bone Health in Cystic Fibrosis: A Retrospective Review of DXA Scan Practices in a Model 4 Hospital

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Background :Significant improvements in life expectancy for Cystic Fibrosis (CF) patients means long-term complications such as CF-related bone disease (CFBD) - characterised by low bone mineral density (BMD) and increased fracture risk - may increase in prevalence. **Methods :** We retrospectively audited CF patients from our specialist unit against European and Cystic Fibrosis Foundation guidelines. We reviewed DXA scans (from 2018 to 2023), risk factors for CFBD, fracture history and bone health medications. **Results:** Of 127 CF patients (mean age 31.9yrs[16-73 yrs]), 61(48%) were taking vitamin D+/-calcium supplements. Twelve (12/127; 9.4%) patients had documented fractures, with one fragility fracture. 110/127 (87%) CF patients had a DXA scan within the audit period. 67 scans were repeated too early, and 22 scans were completed outside the recommended timeframe. Of 122 patients aged <50 years, 106 were scanned during the study period. 55/106 (52%) had Z-scores ≥ -1.0 (normal BMD), 37/106 (35%) had scores of < -1.0 to ≥ -2.0 , and 14/106 (13%) had scores < -2.0 . **Conclusion:** We found high levels of BMD screening and calcium/Vitamin D supplementation, but notable discrepancies in timing of scans compared to guidelines. Prevalence of CFBD was low. Revision of bone health guidelines, particularly in younger CF patients may be warranted. **Conflict of Interest:** The authors declare that they have no conflict of interest.