Oral bisphosphonate prescription in primary care: a baseline audit of practice

Background: Confusion in the primary care initiation, maintenance and review of bisphosphonate treatment for people with high-risk of fracture has been reported, resulting partly from a multiplicity of slightly varying guidance and different patient groups requiring different actions. Further difficulties for generalists in primary care prescribing bisphosphonates is the weak evidence-base supporting use beyond 10 years and widely publicised but low absolute risks (e.g. atypical fractures, osteonecrosis). The National Osteoporosis Guideline Group (NOGG) 2017 guidelines, accredited by the National Institute for Health and Care Excellence, provide clear messages to primary care about treatment duration. Our previously-developed primary care bisphosphonate treatment review flowchart, informed by NOGG guidelines, (<https://goo.gl/N3CyzL>) provides clarity for non-specialist prescribers and a foundation for audit.

Objective: The aim of this baseline audit was to assess practice concordance with recommended treatment periods and reviews. The objectives were to identify whether patients were recorded as receiving appropriate bisphosphonate drug ‘holidays’ depending on their risk status at 5 and 10 years after initiation.

Methods: A search was conducted in the EMIS Web clinical information system to identify patients with repeat prescriptions for drugs affecting bone metabolism. The start dates for oral bisphosphonate treatment, high-risk factors (age ≥75 years, previous hip and vertebral fractures, steroid use), and review data were obtained.

Results:

Discussion: This audit suggests an important gap in reviewing patients on bisphosphonates, resulting in potential over-use. Clearly-recorded bisphosphonate initiation and review dates and risk factors in primary care information systems would facilitate timely treatment reviews and consideration of appropriate ‘drug holidays’ at the 5- and 10-year review points.

Conclusion: The NOGG guidelines and our review flowchart provide a good basis for primary care review and audit of oral bisphosphonates. Action to improve routine review of people prescribed oral bisphosphonates should be prioritised.

# Funding and conflicts of interest

JJE and EC are National Institute for Health Research (NIHR) Clinical Lecturers in General Practice. The views expressed in this paper are those of the author(s) and not necessarily those of the NHS, the NIHR, or the Department of Health and Social Care.

JJE and EC provide general medical services and benefit from quality payments under the Quality and Outcomes Framework, which includes an osteoporosis domain. JJE and ZP have presented a webinar, sponsored by the NOS, on “- Bisphosphonates in primary care: starting, reviewing and stopping”, though no personal financial gain was derived from the webinar.