

Excellence Network Bone Health Improvement project update

March 2022

Why is bone health important in Parkinson's?

Did you know that people with Parkinson's are more than twice as likely to have osteoporosis¹ than those without the condition and it can affect both men and women? People with Parkinson's are also twice as likely to have a fracture and fractures are a major cause of emergency hospital admissions. Those with Parkinson's are twice as likely to be hospitalised due to a hip fracture² than those without the condition.

Despite this, many people with Parkinson's are not routinely assessed for fracture risk. <u>The UK</u> <u>Parkinson's Audit</u> has shown that rates of assessment of fracture risk are generally low (47.6% of patients in 2019) and there has been no significant improvement in the last 3 audit rounds. Therefore, many people are going undiagnosed and untreated.

"I fractured both of my hips and was then diagnosed with osteoporosis. As a man with Parkinson's, I was really surprised as I thought osteoporosis only affected women. I've been working with the Royal Osteoporosis Society to spread the message to as many people as possible." - Person with Parkinson's

"I find taking the bone health preventive treatment easy, and wish it had been started before and not after I had fractured my wrist" - Person with Parkinson's Fractures have a serious impact on the long-term outcomes and quality of life for people with Parkinson's. Mortality rates are also high. In the general population 10% of those with a hip fracture die within one month and a third of people die within 12 months³. For those with Parkinson's this may be higher.

What did we do?

We invited the elderly care and neurology services that took part in the 2019 UK Parkinson's Audit to join a UK-wide initiative to improve the rate and quality of fracture risk assessment for people with Parkinson's. Services were encouraged to use a fracture risk algorithm⁴ to assess their patients during a 4 month period and to enter anonymous data on each person into a custom designed tool. 43 services from across the UK took part in the project and they entered data on 1,131 patients.

What did we find out?

We are still analysing the results but below are some key headlines.

Many of the clinicians involved told us that they had not routinely done systematic bone health assessments on their patients prior to involvement with this initiative.

Key headline findings

- **57%** of the 1,131 patients were male. The average age was 73 years and the average time since diagnosis was 5.8 years.
- 50% had a history of falls and over a third had a history of fractures (37%).
- **16%** were already on treatment for bone health.
- **73%** of cases were identified as being in need of a detailed fracture risk assessment.

In the vast majority of cases the risk assessment was done using the Fracture Risk Assessment Tool (FRAX UK version)⁵. The remainder were done using the Qfracture tool⁶. The FRAX scores are RAG-rated and link to the National Osteoporosis Guideline (NOGG)⁷ for a suggested management plan. The categorisation of risk for the cases assessed was as follows: approximately 15% were red (treat), 37% were amber (request bone mineral density scan) and 45% were green (low risk provide lifestyle advice on smoking, diet and physical activity). Note these figures don't include those assessed using tools other than FRAX and NOGG.

Feedback from participants on the assessment algorithm and the process was extremely positive:

"I found it quite an easy thing to do in clinic. I've also added a template to the clinic letters where I can add the results. The GPs like it."

"It's not too burdensome and it's become part of my routine practice"

"It's become easier as we've been doing it. It's about getting used to routinely collecting the things needed, like height and weight, that enable an assessment to be made if needed."

What's happening next?

We are currently producing a report to summarise the findings from the project which we will make widely available. We want to develop some top tips to help people with Parkinson's look after their bone health, as well as tips and resources for healthcare services. So watch this space!

In the meantime if you would like to know more about bone health you may be interested in the Excellence Network's free online module developed with The Open University: <u>Parkinson's</u> managing bone health and fracture risk.

References

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