Information for patients from JNNP

Can an exercise programme help prevent falls in Parkinson's?

Doing an exercise programme focused on strength and balance training may help people with Parkinson's have better balance, be more active and have less fear of falling. However, it's not yet clear whether this helps prevent falls.

What do we know already?

Falls are a serious concern for people with Parkinson's disease, which causes stiff muscles, slow movements, and poor balance. As many as 2 out of 3 people with Parkinson's have falls each year, which can cause broken bones and other injuries. In comparison, only about 1 in 3 older people have falls. Research in older adults shows that exercise programmes focused on building strength and improving balance can help prevent falls. Researchers have now looked at whether this type of programme might also help people with Parkinson's disease.

Researchers recruited 130 people with Parkinson's who'd had two or more falls in the previous year. Around half (64 people) had group exercise classes for 10 weeks with a physiotherapist and did home exercises as well. The remaining 66 participants continued with their usual care, without an exercise programme.

What does the new study say?

Over 20 weeks, people in the exercise group fell less frequently than those having only usual care. The researchers estimated that exercise participants were 32 percent less likely to fall during their 10-week training and 26 percent less likely to fall in the 10 weeks after.

People in the exercise group did have notable improvements in balance, compared with the other participants. They also had less fear of falling and were more active in recreational settings.

How reliable are the findings?

This was a high-quality study (a randomised controlled trial) and it was carefully done. However, it was too small to tell us for certain whether exercise helped prevent falls. The researchers estimated that they needed at least 92 people in the exercise and non-exercise groups, to be more certain of their findings.

The study also followed participants for only 20 weeks. A longer study would have provided a clearer idea of the benefits of an exercise programme and whether they were lasting.

Where does the study come from?

The study was done by UK researchers at the University of Exeter and Musgrove Park Hospital in Taunton.

What does this mean for me?

Exercise is important for everyone, but it may have extra benefits if you have Parkinson's. This study suggests that focusing on balance and strength training may lead to improvements in your balance and recreational activities, and also lessen your concerns about falling. However, it's not yet certain whether this will actually prevent falls. We need more research to find out.

Goodwin VA, Richards SH, Henley W, *et al.* An exercise intervention to prevent falls in people with Parkinson's disease: a pragmatic randomised controlled trial. *J Neurol Neurosurg Psychiatry* 2011;82:1232–8. http://jnnp.bmj.com/content/82/11/1232.full

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