

# Online anti-robot tests could help Parkinson's sufferers

**Greg Hurst**

The maddening online tools that check whether a user is a robot may now have a less irritating purpose: detecting if someone with Parkinson's disease is likely to develop dementia.

The test, which is at an early stage, skews photographs of dogs and cats to blur the images, which are then shown to patients.

In small-scale trials patients with Parkinson's disease found it harder to identify the skewed images than healthy people, but there were also wide variations among Parkinson's suf-

ferers depending on how much the photograph was distorted.

The study was prompted by an observation that people with Parkinson's had difficulty reading online tests that scramble words and numbers to check if the user is a robot, known as captcha tests, which are used to stop spam or rogue data extraction programs.

The study, led by Rimona Weil, a researcher in molecular neuroscience at University College London and published in the journal *Movement Disorders*, reports that its pilot data suggests that this new technique is more sensitive than current tests for checking



**A test skewed pictures of dogs that were shown to Parkinson's patients**

visual processing ability, although it says that larger-scale trials are needed.

Patients with Parkinson's disease whose visual processing regions are affected are known to be at the highest risk of developing dementia.

The researchers said: "Performance in this test also correlated with a prediction score for cognitive impairment in Parkinson's disease, suggesting that it may have utility as an early marker of cognitive decline, consistent with the literature of Parkinson's disease patients with involvement of visual-processing regions being at the highest risk of dementia."