

## Brain changes can be spotted 'years before' Parkinson's disease emerges

Changes in the brain that can be spotted years before physical symptoms of Parkinson's disease occur might act as an early warning sign for the condition, researchers say.

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The researchers, based at King's College London, say the latest findings could eventually lead to new ways to identify people who might go on to develop Parkinson's; the discoveries could also confirm diagnoses, monitor the disease progression, and aid the development and testing of drugs.

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The research revealed that, compared with scans from 25 healthy participants, scans from participants with physical symptoms of Parkinson's disease showed deterioration to both dopamine and serotonin systems in the brain.

A loss of serotonin neurons was also seen in many regions in the brains of people who had the genetic predisposition to Parkinson's but who did not have physical symptoms.

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The changes were seen about 15 to 20 years before these individuals would typically start to show physical symptoms. In addition, these genetically predisposed participants showed no sign of deterioration in their dopamine system. "That by itself is a major breakthrough on how you see Parkinson's disease," said Politis.

**Read full, original post:** [Parkinson's disease 'could be detected early on by brain changes'](#)