



Parkinson's Disease (PD)

Parkinson's Disease is a progressive neurodegenerative disorder that, unlike Alzheimer's disease and dementia which we have discussed in previous activities, is mainly a movement disorder.

The most common and stereotyped symptom of PD is a tremor that can occur in the hands, arms, legs, jaw or face. Additional symptoms that may occur later in disease include bradykinesia (which refers to a slowness of movement), stiffness/rigidity and loss of balance and coordination.

There is also increasing evidence to suggest there are also non-motor symptoms of PD, many of which occur prior to the development of tremor or other physical symptoms. These include disruptions to sleep patterns, a loss of sense of smell and changes to mood.

Question: Which types of neurons and areas of the brain may be affected in PD? Think back to the 'what is neurodegeneration' activity to help you.

There are, in fact, multiple types of what is known as 'parkinsonism'. The most common form, which people describe as Parkinson's disease, is actually called Idiopathic Parkinson's disease. The word idiopathic means of unknown cause.

Vascular parkinsonism, similarly to vascular dementia which we explored in activity 3, results from a restricted blood supply to the brain.

Drug-induced parkinsonism, unlike the other forms, is usually only temporary and a person will recover when they stop taking whatever medication was causing in the symptoms.

Task 1: Watch the video 'What causes Parkinson's?' and explore the other resources at parkinsons.org.uk to learn more about the disease

<https://www.parkinsons.org.uk/information-and-support/what-causes-parkinsons>

As with all neurodegenerative diseases, there is currently no 'cure' for PD. However there are a number of medications that can be taken to help alleviate symptoms of the disease.

The choice of treatment will be tailored to each individual and will depend on symptom presentation, age and other health issues. The most common treatments include levodopa and dopamine agonists, both of which work by increasing the level of dopamine in the brain. (Re-visit activity 2 to learn more about death of dopaminergic neurons as a cause of PD).