

"On/Off" Motor Fluctuation in Parkinson's Disease

What does 'On/Off' mean?

The "On/Off" Phenomenon in Parkinson's Disease (PD) is related to fluctuating benefit of the medications used to treat PD.

Being "On" describes the time when the Person with Parkinson's (PwP) feels that their medication is beneficial and that their symptoms are well controlled.

Being "Off" describes the time when the PwP feels that their medication is not working as well as usual, and some of their symptoms may have returned (either motor: stiffness, slowness or tremor; or non-motor: anxiety, nausea, depression).

The 'On/Off' phenomenon can best be described as a quick, unpredictable reappearance of PD symptoms. Likewise, switching from "Off" to "On" can occur just as suddenly. The speed of this shift can be so dramatic that some people have likened this effect to a light switch being turned on and off.

"On/Off" fluctuations are different from the phenomenon known as "Freezing", which can also affect people who have had Parkinson's for some time. "Freezing" is the word used to describe the experience of stopping suddenly while walking or when trying to initiate walking, and people feel as though their feet are 'frozen' or stuck to the ground. While "Freezing" episodes tend to last only a few seconds, an "Off" period can continue for minutes, or even hours.

"On/Off" effects do not just affect a person's mobility. They are often accompanied by changes in other symptoms, such as an increase in anxiety, visual disturbances, sweating or sometimes, pain in the limbs. Some people can find 'On/Off' fluctuations very distressing, especially as they can happen suddenly and unexpectedly. Other people are able to judge in advance when an episode is likely to occur.

How is the "On/Off" Phenomenon Treated?

Many of the strategies that can be used to treat "Wearing-off" effects can also be tried when someone is experiencing "On/Off" fluctuations, such as ensuring that you are taking your medication correctly, taking them with plenty of fluid and avoiding food at tablet time.

If your "On/Off" fluctuations are very bothersome, your doctor or PDNS may suggest a change in medication timing, dosage or type. Your doctor may advise you to try an enzyme inhibitor, or a long acting dopamine agonist to give smoother control of your symptoms, a concept devised to achieve a continuous delivery of dopamine to the brain. This continuous delivery of dopamine could also be achieved by the use of Apomorphine or Duodopa. For more information, speak to your doctor or PDNS, and see our information sheet: Medications and Parkinson's.

What Can People with Parkinson's Do to Help Themselves?

Documenting "On" and "Off" time in a 24-hour diary, where they can indicate the times and frequency of their symptoms and fluctuations, along with the times and frequency of their dosage, can be useful, it may begin to show a pattern which will allow the doctor or PDNS to devise a new regime. The 24 hour diaries are available from the Parkinson's Association and the website www.wearingoff.com.

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Other Relevant Information Sheets:

M1.1: Motor Fluctuations in Parkinson's Disease

M1.2: Wearing Off in Parkinson's Disease

M1.4: Dyskinesias in Parkinson's Disease

M1.5: Freezing in Parkinson's Disease

G4: Medications and Parkinson's Disease

DISCLAIMER – The information on these pages is not intended to be taken as advice. No changes to your treatment should be made without prior consultation with your doctor or allied health professional.

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