Parkinson's Disease

Parkinson's disease (PD) is a common neurological disorder among elderly people. It usually begins after the age of 60. People under 40 or 50 who have it would be classified as young on-set cases. There are approximately 8,000 to 10,000 PD patients in Hong Kong.

PD is a result of the loss of dopamine-producing brain cells. Dopamine is a neurotransmitter that helps co-ordinate body movements. Symptoms of PD include resting tremor (involuntary shaking) of hands, arms, legs, jaw, head and neck; stiffness of the limbs and trunk; slowness of movement; and impaired postural balance. Sufferers may experience difficulties in walking, speaking, writing and swallowing.

Proper treatment and therapy can improve the quality of life of PD patients. Although there is no cure for PD at present, medications help control the symptoms. Levodopa and dopamine agonists are drugs commonly used in treating PD. Besides the common side effects like nausea, vomiting and postural hypotension (abnormally low blood pressure), high levels of dopamine agonists (a compound that activates dopamine) can cause hallucinations. Long-term use of high dosages of levodopa may lead to involuntary movements and on-off phenomenon. The latter refers to sudden switches between being able to move (i.e. 'on') and being immobile (i.e. 'off').

In some cases, side effects may be relieved by adjusting the dosage of drugs. If the side effects remain, patients might consider undergoing an operation called "deep brain stimulation". Electrodes, connected to a stimulator, are implanted into the brain as part of the surgery. Electrical signals generated by the stimulator reduces the symptoms. Most patients can cut down their medications substantially.