

## **INTRADUODENAL LEVODOPA IN THE TREATMENT OF ADVANCE PARKINSON'S DISEASE**

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Progress in Neurology has introduced different treatment modalities for Parkinson's disease. Despite this advance, long term complications such as motor fluctuation and dyskinesia remain a challenge. Deep brain stimulation has been introduced as an alternative in these difficult to manage patients. Treatment with levodopa still remains as the mainstay of the treatment of advance Parkinson's disease. The relative short serum half-life of oral levodopa/carbidopa and its erratic absorption due to delayed and inconsistent gastric emptying are thought to be important factors in the development of motor fluctuations. Continuous infusion of levodopa/carbidopa directly into the small intestine of PD patients may results in marked reduction of motor fluctuations by reducing plasma levodopa variability. The development of a micronized levodopa (20 mg/ml) and carbidopa (5 mg/ml) suspension utilizing a methylcellulose gel allow the high levodopa concentration necessary for long-term enteral therapy. Clinical evidence showed marked reduction of motor fluctuations and dyskinesias by intraduodenal administration of this suspension. Intraduodenal levodopa infusion may offer another modality in the treatment of advanced Parkinson's disease.