WHAT IS THE BEST TREATMENT IN ADVANCED PD? – DUODOPA

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Long-term L-dopa therapy is associated with the development of motor fluctuations and dyskinesias in the majority of patients with Parkinson's disease (PD). Dyskinesia are likely to result from the interaction between the primary degenerative process and the chronic exposure to pulsatile oral L-dopa therapy.
All studies comparing early L-dopa vs. dopamine agonist early therapy indicate that initiation with agonists is associated with a reduced risk for motor complications – in particular dyskinesias – possibly because agonists longer half-lives provide continuous dopaminergic delivery.
In advanced patients switching from a pulsatile to continuous dopaminergic delivery avoids peaks and troughs in L-dopa plasma and may also widen the therapeutic window. Currently this can be accomplished only with subcutaneous apomorphine or duodenal levodopa infusions. Particularly duodenal L-dopa infusion is promising because continuous delivery with an optimized dose can be ensured and peripheral L-dopa can be kept stable within the patient's individual therapeutic window allowing replacement all oral medications.
The levodopa is administered via a permanent catheter implanted into the duodenum by percutaneous endoscopic gastrostomy (PEG) under local anaesthetic. Administration of the drug is controlled by a pump with an adjustable infusion rate allowing fine-tuned titration, individual adaptation of dose and also allows administration of extra doses (if needed).
Current experience indicates that a satisfactory therapeutic window can be achieved and maintained for several months in advanced PD patients. This is associated with improved motor fluctuations and reduced disabling dyskinesia, resulting in significant benefit in quality of life and several non-motor domains.