Technology

Dive technology consist in a dopaminergic stimulation by continuous intra-cerebro ventricular delivery of anaerobic dopamine, in the third ventricle, closed to the target of the nigro-striatal system in Parkinson's disease at the stage of motor fluctuations:

The preclinical data displayed a huge symptomatic effect in MPTP mouse and 6 OH rat models without dyskinesia and a large therapeutic index as compared with peripheral administration of L-dopa.

A neuroprotection of the dopaminergic neurons has been obtained within the substantia nigra and the striatum in the MPTP mouse model.

Benefits

- It is a powerful treatment of L-dopa related motor and non-motor complications with greater ergonomy (pump inside the body refilled every 3 months) and efficacy than Duodopa® and apomorphine pump and lower surgical risk (easy surgery procedure without the risk of deep haemorrhage) and larger scope of indications than deep brain stimulation (no post surgery dopamine depletion).

- It can be indicated at the end of the honeymoon period of the patients, if we consider the neuroprotection and neurorestoration properties and the fine-tuning of the adapted dose for each patient, which avoids degeneration worsening associated with under and over dosages.

Applications

- DIVE treatment represents a game changing strategy in Parkinson's disease at the stage of motor fluctuations