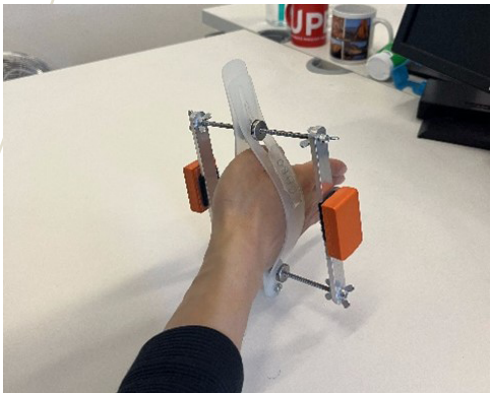
ALTERNOPARK

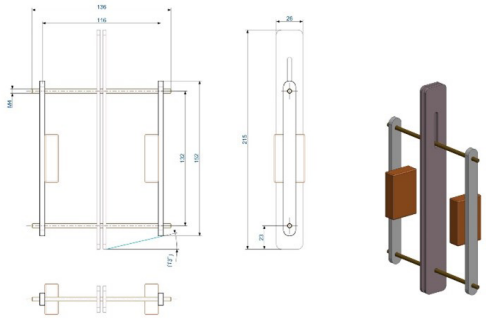
Search for the kinematic parameters of movement that are reliable and discriminant for the monitoring of the normal movement for a Parkinsonian patient population.

ERGANEO
L'AVENIR EST FAIT D'AUDACE

PRESENTATION

Neurological movement disorders disrupt the execution of alternating movements which are the basis of most daily movements. Among these disorders, Parkinson's disease mainly affects large amplitude movements (hypometria). Because of the lack of tools allowing simple and rapid measurements of the different kinematic parameters of rapid alternating movements, the standard clinical examination of these movements cannot be achieved in a quantified manner. We will seek, by comparing a sample of healthy subjects and a sample of subjects with moderate Parkinson's disease, the kinematic parameters of the movement (amplitude, speed, acceleration, fluidity) that are most discriminating compared to normal movement.





Parkinson - Diagnosis - Alternating movements
Alternometry - Inertial sensors

APPLICATIONS

- Help with neurological diagnosis
- Help with susceptibility diagnosis in the healthy population
- Home-based utilization for the re-education of alternating rotational movements of the forearm

COMPETITIVE ADVANTAGES

- Portable device that fits in the clinician's coat
- Low costs
- Easy to use

INTELLECTUAL PROPERTY

One patent application : EP4014840

PUBLICATIONS

Gracies JM, Diwan M, Lewthwaite A, Toma M, Weisz D, Olanow CW. Park Dis Rel Dis 2001:7:S45

Gracies JM, Guo LJ, Crisan D, Yang BY, Weisz D, Olanow CW. Mov Dis 2002;17(Suppl n5):S164

Mardale V, Behnegar A, Baude M, Gracies JM. Ann Phys Rehabil Med 2012;55(1):e205

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