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The Unravelling of a 'Category Mistake': A New Exegesis For Post CNS Lesion Paralysis Process and the Development of a New Restoration Therapy

Topic: Exercise

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BACKGROUND

According to evidence, central nervous system (CNS) lesion paralysis has an impact of long-term residual disability in at least 50% of stroke survivors. In this study, we are looking at a weird kind of latent space of possibilities for stoke paralysis restoration, beyond the standard local lesion neural disconnection view. By 'category mistake', we refer to an explanatory mistake about the category of the modalities involved in the paralysis process. We aim for evidence that paralysis is caused by an involuntary self-inhibition process of sequential motor ordering system and a method for motion restoration.

METHODS

We are using informed, thorough active clinical observation, with the help of photos and videos, in order to determine the correct problem space of the cause of motor paralysis in patients with CNS lesion. Our hypothesis is that the "inability to destabilize the immobile limb in order to initiate action", is caused by the unintended lateral neck shift perturbation, during the first unsuccessful attempts to move the immobile limb, which compromises limb's functional motor space. We provide a supported stable visually-guided training posture with the missing inputs that can destabilize the ongoing immobile limb state, while we instruct the patient to exert the movement action towards a "forced" kind of attentional re-visualization of the hemiplegic limb's perceptible motor action initiation space-time context.

RESULTS

Patients usually regain one particular targeted sequence of the lost voluntary movement after each 45 min session per week, with an average of 5 to 10 overall sessions needed to complete the therapy. Previous physical core body condition is important facilitating factor, while sufficient cognitive attentional focus is a prerequisite.

CONCLUSION

We present a structured, innovative and effective therapeutic method based on lost motion initiation, by correctly shifting the rehabilitation focus at limb's imperceptible closure from the collective somatic motor memory networks. Our work fulfils all three prerequisites of a method based on scientific active inference: is belief-free, creates a new generative action model for the exceptional state of CNS paralysis and excels Value Function of Action (optimal payoff).

Statement of Disclosures

None

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