

Robots aid stroke patients' recovery

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PARIS – A spin-off from the Universidad Miguel Hernández de Elche in Spain has been granted a worldwide patent for its rehabilitation robots that assist patients after suffering a stroke.

Instead Technologies Ltd. said it has developed two robots: RoboTherapist 2D and RoboTherapist 3D.

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RoboTherapist 2D is a planar robot that helps patients perform movements in two dimensions. It has sensors to detect the patient's condition and an audible feedback system. If the patient cannot move his or her arm, the robot helps lift it to a certain point. The brain's plasticity is then improved, and damaged connections are restored, the company said.

RoboTherapist 3D is able to work both in supine position as seating position. This feature makes it particularly valid in the first stage of rehabilitation that takes place at the hospital and in the following stages when the patient still needed regular therapy sessions. It can be used for relearning daily living skills such as taking a glass, drinking and eating.

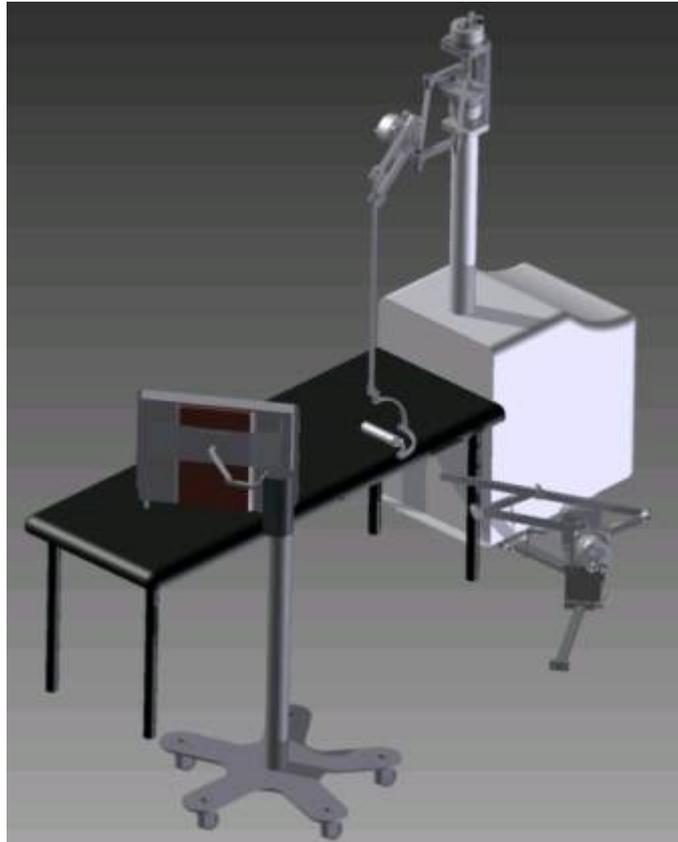
The company said it is now financing the development of two prototypes. Trials in public and private hospitals will follow.

Instead Technology noted that its current focus is on robots to facilitate stroke recovery. It is, however, collaborating with associations for patients with other diseases, including Parkinson, Alzheimer and multiple sclerosis.



*User interface of the RoboTherapist3D
Source: Instead Technologies*





*CAD design of the RoboTherapist3D
Source: Instead Technologies*



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(English subtitles)*

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