

Robotic arms and legs launched in Singapore

27 August 2012 | News | By BioSpectrum Bureau

Robotic device for stroke rehabilitation enters Singapore



Singapore: Singapore-based Kinesis Physio & Rehab has brought in two new innovations from the US and Canada focusing on stroke rehabilitation. The first is the Tibion Bionic Leg, the world's first wearable robotic device to aid in stroke recovery.

The second innovation is the ReJoyce Hand and Arm Rehabilitation system, which is a home-based therapy that can be supervised by therapists over the internet. The therapy involves a range of exercise games with adjustable difficulty levels, to maximise motor recovery of the hand, arm and shoulder.

This is the first time that the Tibion Bionic Leg and ReJoyce Hand and Arm Rehabilitation system are being made available to the public in South East Asia, through Kinesis Physio & Rehab.

Mr Philippe Steiner, CEO, Kinesis Physio & Rehab, said that, "Both the Tibion Bionic Leg and ReJoyce system work by encouraging stroke patients to repeat certain movements of their affected limbs in a regular and consistent manner. This supports the principles of neuroplasticity, which is the nervous system's ability to renew and rewire itself, and this is crucial in recovering motor ability during stroke rehabilitation."

Tibion Bionic Leg is a battery-powered robotic trainer consisting of a pressure-sensing shoe insert, motors to provide leg support, an angle sensor in the knee and a computer where the therapist can programme the level of intensity and monitor patients' movements. Using the Tibion Bionic Leg, the patient initiates effort by applying weight to the affected foot/ leg.