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Effectiveness Of Treadmill Harness Suspension System And Kinesiotaping Physiotherapy For The Treatment Of Subacute Stroke Patient: A Single Case Study-Experimental Design.

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The Department of Physiotherapy is pleased to inform that we are now equipped with "**Treadmill Harness Suspension System**" for Supported Ambulation for Hemiplegics Patients.

A 47 Year Female patient weighing 72 kg with the History of 8-month-old Left MCA Stroke was referred to the Department of Physiotherapy for the treatment of Hemiplegia. She had difficulty in walking with Abnormal Posture and Gait Patterns developed post Stroke. Patient was lacking Motor Control on the Right Hemiplegic Side of Body in both upper and lower limbs with Impaired sensations. Patient was severely Spastic and spasticity was assessed by **Modified Ashworth Scale (MAS)** and **Tug scale**. Patient was also having difficulty in speaking (Dysarthria) with right side Facial Weakness present.

Physiotherapy Interventions Focused on Reduction of Spasticity and correcting abnormal posture and gait deviations.

Patient was Ambulated on the **Treadmill Harness Suspension System** while manually correcting Gait pattern and increasing joint proprioception and kinesthetic awareness.

Treadmill harness system is also indicated for Rehab in neurological conditions like Spinal Cord Injury, Guillain Barre Syndrome, Multiple Sclerosis, Cerebral Palsy, Myopathies and Parkinsonism etc.

Further **Kinesiology Taping (K Tape)** was used for the correction of wrist drop and Foot drop and for giving Biofeedback as well as sensory stimulation.

CIMT- Constraint Induced Movement Therapy was used for the patient for encouraging the use of affected hemiplegic limb and restricting the use of non-affected limb.

Outcome- Before joining the Rehab patient was lacking total motor control and sensations on the right side of body.

After few days of treatment Improvement was seen in the patient with decreasing spasticity and Returning of Motor Control and Sensations again.

patient can now **stand independently** with very little assistance and had improved much in the Gait pattern. Improvement was also seen in Balance and patient is now motivated with her life.

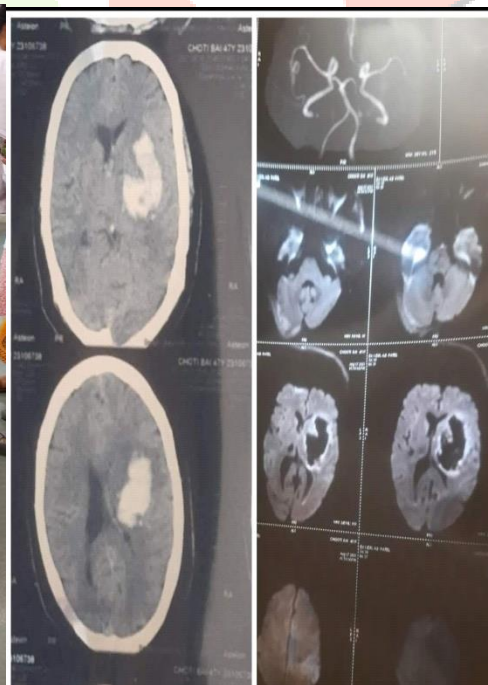


(Independent Standing)

- 1.) A. Image showing the dependency of patient on wheelchair before Rehab.
- B. MDCT scan indicating Left side Hemorrhagic Stroke with prefocal edema in the left gangliocapsular region.



A.)



B.)

- 2.a - Image showing supported Ambulation on Trademill Harness Suspension System
- b- Kinesiology Taping for Wrist Drop



a.)



b.)



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