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Functional Rehabilitation of the patient with incomplete D11 Spinal cord injury

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Description

To study the effectiveness functional rehabilitation approach in the patient havingD11 spinal cord injury. An adult 32 years old male, met with an accident in the form of electric shock, got spinal cord injury at level of D11 & become paraplegic. He received rehabilitation training in the form of Physiotherapy, Occupational Therapy, vocational training, functional training, transfer training, Public Utility Services training. After 3 months of rehabilitation he become independent in his mobility indoor & outdoor with assistive devices.

Background

- It is mostly seen due to RTA (Road traffic accidents) and it accounts for 80% of total SCI patients.
- Mainly younger populations are affected who are the bread earner of the society.
- In Spinal cord Injury nervous system is affected which will affect functional dependence on others for ADLs as well as survival.
- Incomplete Thoracic spinal cord injury patient have spared Upper extremities, some trunk muscle and minimum power lower extremity with use of those & some assistive devices patient can achieve the functional independence in his life
- Ability can overcome the disability.

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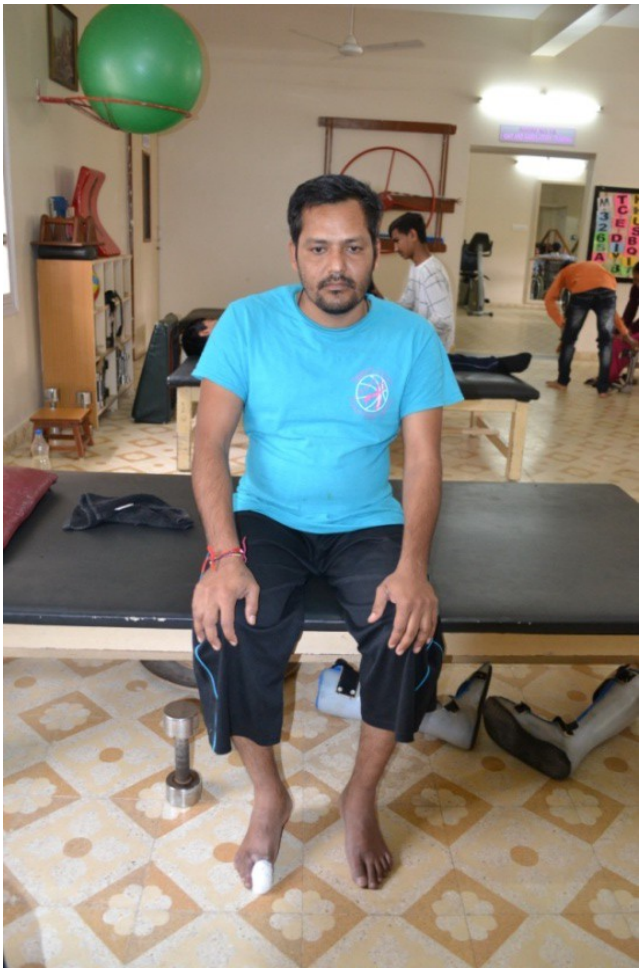

Methodology

- Study design : Single case study
- Patient is assessed with, Spinal Cord Injury Measures(SCIM) and Walking Index Spinal Cord Injury (WISCI II)
- The patients underwent for rehabilitation training in the form of Upper Extremity Strengthening exercises, Lower Extremity Stretching as well as Selective Strengthening, Core activations, Core strengthening, Trunk facilitations, Trunk Balancing, Pre-Functional Training, Functional training, Pre Gait Training, Gait Training, Bilateral KAFO with locked knee joint which have been progressed to Bilateral KAFO with free knee joint or high level AFO which have been further progressed to bilateral AFO & finally without any orthosis, Activities of Daily Living Training, Transfer Training ,Vocational Training, Public Utility
- Services Training, Psychological Counselling and Motivation, Sports and Recreation.
- Functional gait training given indoor then it is progressed to outdoor gait training on plane surface, uneven surface, soft surface etc
- Patient is trained for carrying out his all ADLs like selfcare,bladder –bowel management, transfers and mobility i.e.: indoor and outdoor, stair management.
- Patient have been reassessed after every months throughout rehabilitation with Spinal Cord Injury Measures (SCIM) and Walking Index Spinal Cord Injury (WISCI II).

Patient having incomplete spinal cord injury at D11-D12 have shown significant improvement in Spinal Cord Injury Measures (SCIM) and Walking Index Spinal Cord Injury (WISCI II) after Institutional Rehabilitation

Rehabilitation to the incomplete Thoracic Spinal cord Injury patient in the form of Use of spared muscle groups & other assistive devices can give the more independence to the patients in their Activities of Daily Living as well other areas of survival.

Conclusion

Functional Rehabilitation approach is the main tool for the Incomplete Thoracic Spinal cord Injury patient to gain the independence in their life again.

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