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# Spasticity Predictive Factors of Inpatients With Stroke Diagnosis During Their Hospitalization in a Rehabilitation Clinic

**Topic:** Complications/Sequelae (ie Spasticity, Immobilization and Frailty)

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## BACKGROUND

To study and analyze the incidence and onset time of regional spasticity of stroke patients suffering from their first stroke that are inpatients in a rehabilitation clinic. To analyze the predicting factors of early spasticity.

## METHODS

Three hundred forty two stroke patients with no history of previous stroke that were treated as inpatients immediately after their stroke in our rehabilitation clinic were assessed during the period of July 2023 and July 202 . 89/342 patients demonstrated spasticity and from them 71/89 patients were selected fulfilling the criteria of onset of rehabilitation hospitalization 7-90 days (Mean Value 17,8 days) after their stroke onset. Muscle tone was weekly assessed.

## RESULTS

89/342 presented signs of spasticity (34.2%) inclusive of patients with mAshworth scale of 1 and Brunnstrom recovery scale of 2. 41/71 of patients were men (57,7%) and 30/71 women (42.25). Ischemic 57/71 (80,28%) and 14 hemorrhaging (7.10%). Left hemiplegia 34 /71 (47.8% and right hemiplegia 37/71 (52.11%). Age span 22.85% >80 y.o, 30.5% (71-80) , 25.71% (61-70), 11.45% (51-60) and 4.41% (41-50).24.28% of patients had comorbidities and 55.7 % were smokers and 13.0% obese. Admission Barthel Index ranged 2-24/100 with mean value of 9/100 38/71 (53.52%) of patients received in Botulinum Toxin treatment and 26/71 (36.6%) were treated only with per os antispastic drugs. (34.2%) of patients with diagnosis of first Stroke had spasticity onset at the acute and subacute phase. Sex, hemiplegia side and age are not relevant to the appearance of hypertonia. Patients with lower Barthel Index and ischemic type of stroke with lifestyle characteristics as obesity and smoking tend to manifest spasticity after stroke. Therefore it is important during the admission of stroke patients in a rehabilitation clinic to systematically assess on a weekly basis the muscle tone to detect signs of early onset spasticity.

## CONCLUSION

The training of the nursing and therapeutic staff to detect hypertonia signs is crucial to diagnose and treat early spasticity, resulting in a more favorable rehabilitation outcome.

**Statement of Disclosures**

None

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