# REHABILITATION OUTCOMES OF POST-STROKE FACIAL PALSY IN FIFTEEN PATIENTS : A PROSPECTIVE STUDY

**Abdelhakim Kabil, Rime Dades, Mouad Yazidi, Jihad El Achkoura, Ryme El Beloui, Hasnaa Boutalja, Nada Kyal, Fatima Lmidmani, Abdellatif El Fatimi**

University Hospital Center Ibn Rochd, Morocco
e-mail: abdelhakimkabil81@gmail.com

## Background and Aims

Post-stroke facial palsy significantly impairs motor function and quality of life. While rehabilitation is widely recommended, evidence on optimal protocols remains limited. This study evaluates the efficacy of a multimodal rehabilitation program in 15 patients with facial palsy following ischemic or haemorrhagic stroke. The aim of the study is to demonstrate the importance of early and appropriate rehabilitation of facial palsy following a stroke to improve function and quality of life.

## Methods

A prospective study was conducted on 15 consecutive patients (mean age 62 ± 8 years; 9 males, 6 females) with unilateral central facial palsy secondary to stroke. All participants underwent a 12-week standardized rehabilitation program combining : - Neuromuscular re-education (mirror therapy, proprioceptive neuromuscular facilitation), - Electrostimulation (at 20–50 Hz), - Functional training (speech, mastication, and eyelid closure exercises). Outcomes were assessed at baseline, 6 weeks, and 12 weeks using the House-Brackmann Grading System (HBGS), Sunnybrook Facial Grading System (SFGS), and the Facial Disability Index (FDI).

## Results

- Functional Improvement : 12/15 patients (80%) achieved ≥1-grade improvement on HBGS ($p < 0.01$). - Symmetry : SFGS scores improved by 42% ± 12% ($p < 0.001$), with marked gains in voluntary movement (e.g., smile amplitude increased by 58%). - Quality of Life : FDI social/well-being subscores rose from 45 ± 10 to 72 ± 8 ($p < 0.05$). Two patients developed mild synkinesis.

## Conclusion

A structured 12-week multimodal rehabilitation program significantly improves facial symmetry, motor function, and psychosocial outcomes in post-stroke facial palsy. Early intervention and individualized adjustments (e.g., electrostimulation parameters) are critical for minimizing complications. These findings support integrating such protocols into standard post-stroke care.

**Keywords:** Facial, palsy, stroke, rehabilitation, functional