

STUDY PROTOCOL

Official Study Title:

Effects of Kinesio Taping on Upper Extremity Motor Function, Pain, General Health and Depression in Acute Stroke Patients: A Randomized Controlled Trial

NCT Number: To be assigned

Document Date: November 2025

Sponsor: Koç University

Principal Investigator: Havvanur Albayrak, MD

Study Location: SB Istanbul Education and Research Hospital

1. Background and Rationale

This randomized controlled trial was conducted to evaluate the clinical effects of kinesio taping applied to the upper extremity in patients with acute ischemic stroke presenting with flaccid motor tone. The study investigates whether kinesio taping provides additional benefit beyond standard rehabilitation.

2. Objectives

Primary: To assess changes in Fugl-Meyer Assessment (FMA) upper extremity subscores.

Secondary: To evaluate changes in Brunnstrom stages, pain (VAS), functional status (HAQ), and depression (BDI).

3. Study Design

Prospective, randomized, controlled, parallel-group clinical trial with two arms: 1) Kinesio Taping, 2) Sham Taping.

4. Participants

Inclusion criteria: Adults aged 50–80, acute ischemic stroke within 6 months, Brunnstrom Stage 1 upper extremity.

Exclusion criteria: Hemorrhagic stroke, upper limb surgery, severe shoulder pain, neurological comorbidities.

5. Interventions

Kinesio taping applied to the dorsum of the hand and forearm with ~25% tension.

Sham taping applied without tension and without crossing joints.

Both groups received standard rehabilitation.

6. Outcome Measures

Primary: FMA subscores (Shoulder-Elbow-Forearm, Wrist, Hand, Sitting Position, Total UE Score).

Secondary: Brunnstrom staging, VAS, HAQ, BDI.

7. Statistical Analysis

Non-parametric tests used for within-group and between-group comparisons. Significance level $p<0.05$.

8. Ethical Considerations

Study approved by institutional review board. All participants provided informed consent.

9. Timeline

Start Date: June 2018. Completion: December 2018.