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Carpal tunnel release by **limited 1: Surgical** **palmar 1: Surgical** **incision 1: Surgical** vs traditional **open 1: Surgical** **technique 1: Surgical** : randomized controlled trial.

AIM To compare a **limited 1: Surgical** **palmar 1: Surgical** **incision 1: Surgical** for carpal tunnel release (CTR) with a traditional open technique, which is still considered the gold standard.

METHODS **Seventy-two P: Sample size** patients with a **carpal P: Condition** **tunnel P: Condition** **syndrome P: Condition** were individually randomized into the trial (**limited 1: Surgical** **incision 1: Surgical** **CTR 1: Surgical**) (n=36) and control group (traditional **technique 1: Physical** **CTR 1: Physical**) (n=36). In the trial group, skin incision parallel to the thenar crease was made up to 2.5 cm in length, under an operating microscope and endoscopic **transillumination 1: Surgical**. Skin incision in the control group began at the distal border of the carpal ligament, followed the longitudinal crease of the palm, and crossed the base of the palm in a zigzag fashion. Three months after surgery, the patients were asked about symptomatic relief and intervals between the operation and return to their daily activities and work, and examined for **scar 0: Physical** **tenderness 0: Physical** and **esthetic outcome 0: Physical**. **Distal 0: Physical** **motor 0: Physical** **latency 0: Physical**, **conduction 0: Physical** **velocity 0: Physical**, **scar 0: Physical** **length 0: Physical**, **scar 0: Physical** **width 0: Physical**, and **operation 0: Other** **time 0: Other** were measured.

RESULTS There were no differences between the two groups in **symptomatic 0: Physical** **relief 0: Physical** and electrophysiological parameters. **Intervals 0: Other** **between 0: Other** **the 0: Other** **operation 0: Other** and **return 0: Other** **to 0: Other** **daily activities 0: Physical** (median 5 days, range 2-15) were shorter in the trial group than in the control group (median 10 days, range 2-21;  $p<0.001$ ), as well as the intervals between the **operation 0: Other** and **return 0: Other** **to 0: Other** **work 0: Other** (median 15 days, range 5-45 vs median 30 days, range 10-60;  $p<0.001$ ). **Scar/pillar 0: Physical** **tenderness 0: Physical**, **scar 0: Physical** **length 0: Physical** and **width 0: Other**, **esthetic 0: Other** **outcome 0: Other**, and **operation 0: Other** **time 0: Other** were significantly better in the trial group.

CONCLUSION **Limited 1: Surgical** **palmar 1: Surgical** **incision 1: Surgical** **CTR 1: Surgical** is as effective and safe as traditional CTR technique, but with better postoperative recovery and cosmetic results.