

# Immediate Effects of Counterforce Bracing vs. Kinesiotaping During Activity: A Randomized Crossover Trial in Patients with Lateral Elbow Tendinopathy

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## INTRODUCTION

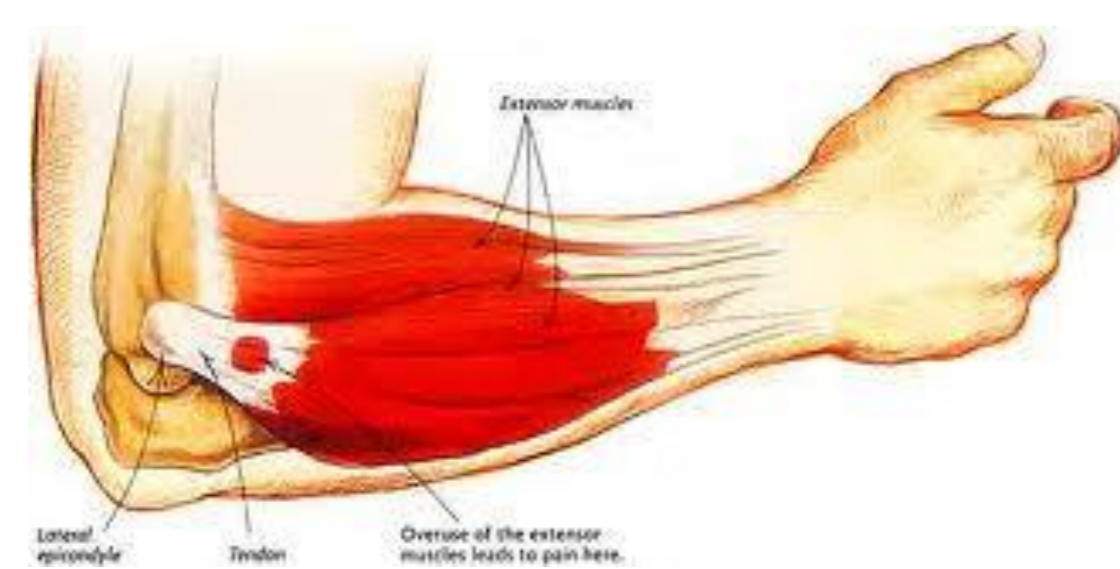
- Lateral elbow tendinopathy (LET) is common, and benefits from orthotic (splinting) intervention. No clear evidence on a superior orthoses is yet available. Many RCTs do not include activity.

## PURPOSE

- To compare the efficacy of counterforce bracing and kinesiotape (KT) immediately upon application and following five minutes of repetitive upper extremity activity in patients with LET.

## SUBJECT DEMOGRAPHICS

Demographic	N = 30
Mean age	45 (range 29-61)
Gender Male : Female (%)	56 : 44 (%)
Duration of symptoms (months)	24 ± 20.7 months
Worker's Compensation (yes/no)	(18/14)
Mean PRTEE (pain & function)	39 (range 5-81)



## METHODS

**Intervention:** Counterforce brace or Kinesiotape (KT)

**Type of Trial:** Randomized; Cross-over

**Exposure:** Fit-HaNSA activity task

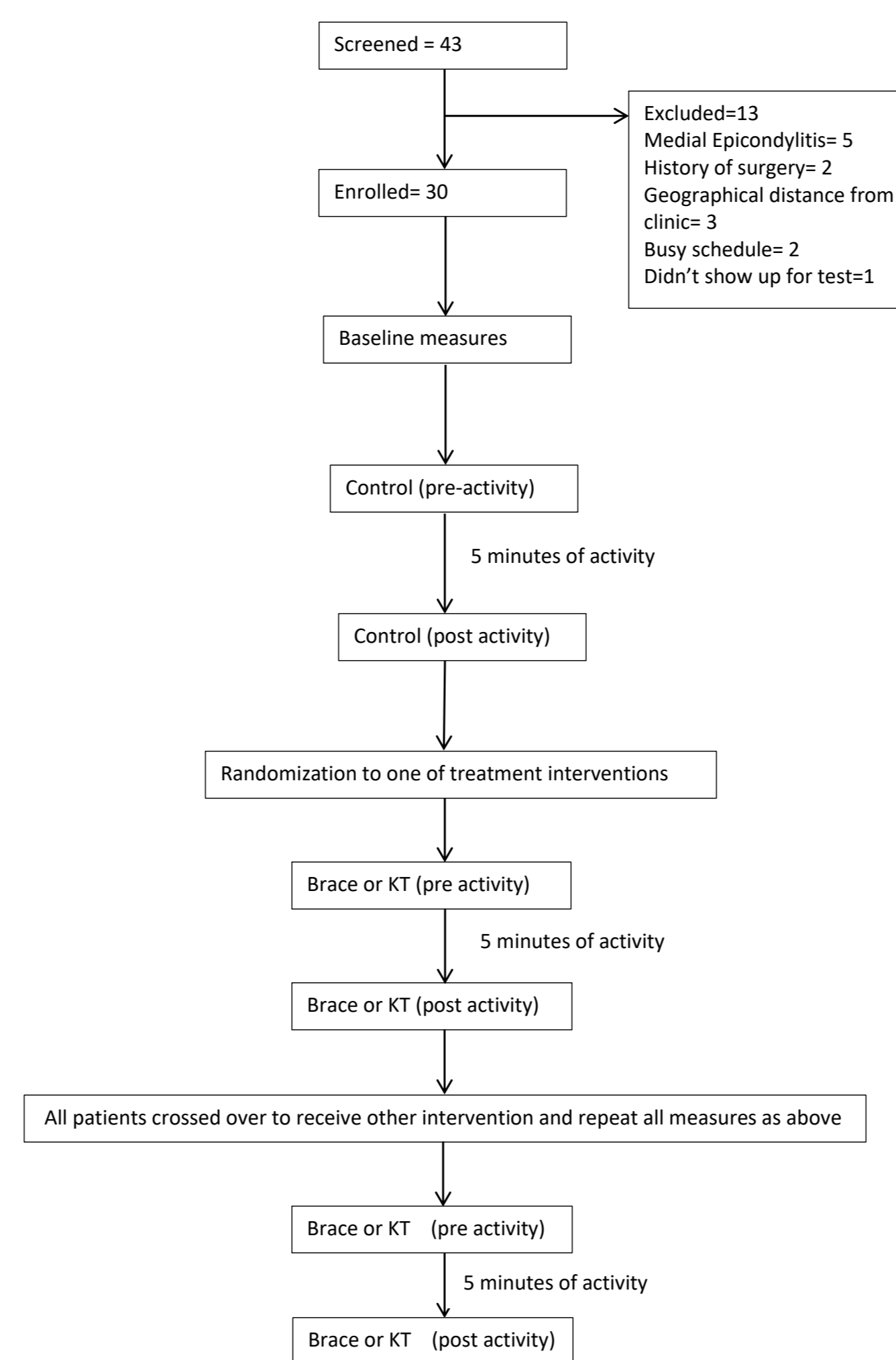
**Outcomes and Outcome Measures**

- Pain-free grip strength (PFGS)
- Pressure Pain Threshold (PPT)
- Numeric Pain Rating

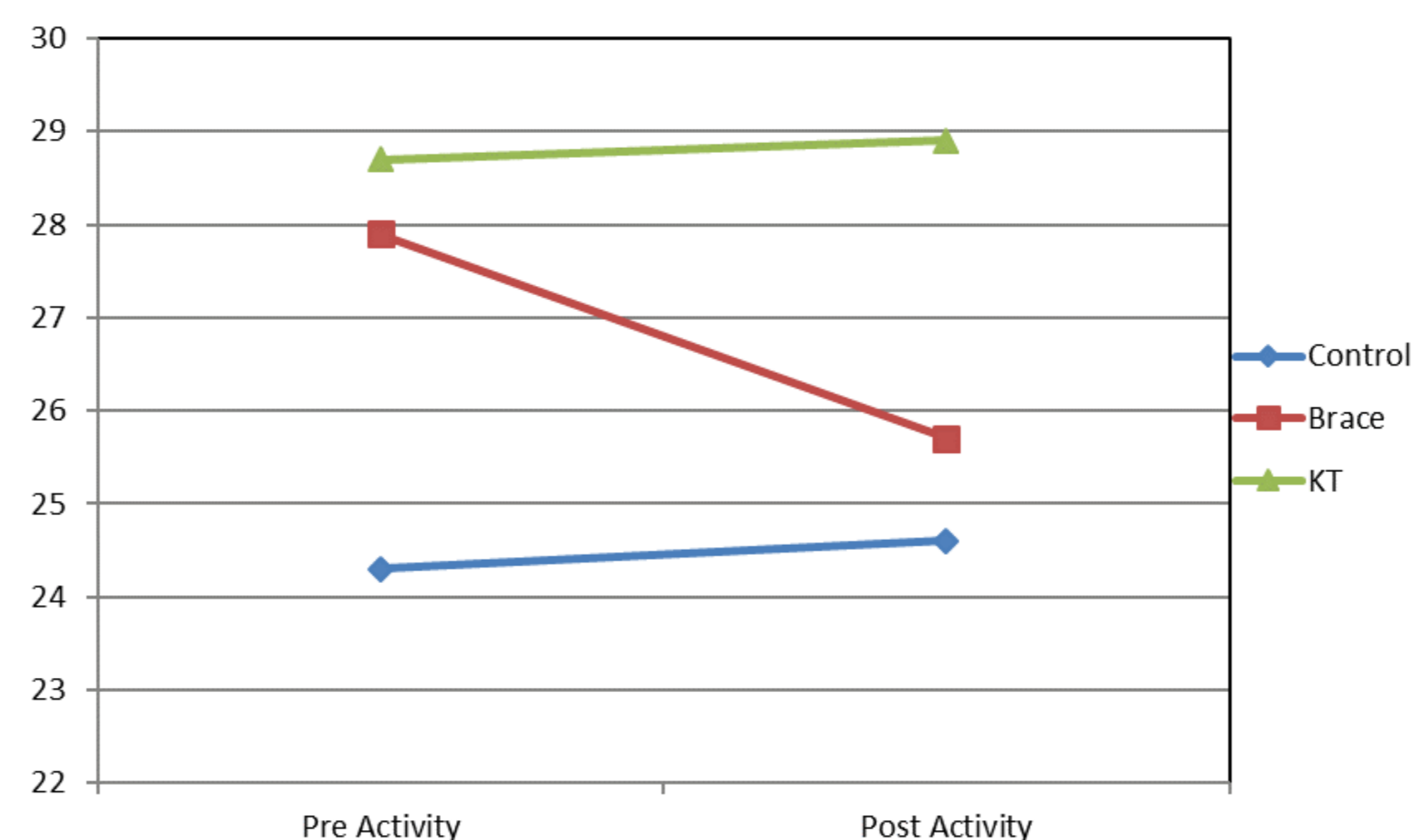
**Analysis:** GLM

## RESULTS

FIGURE 1-Flow of participants through the study

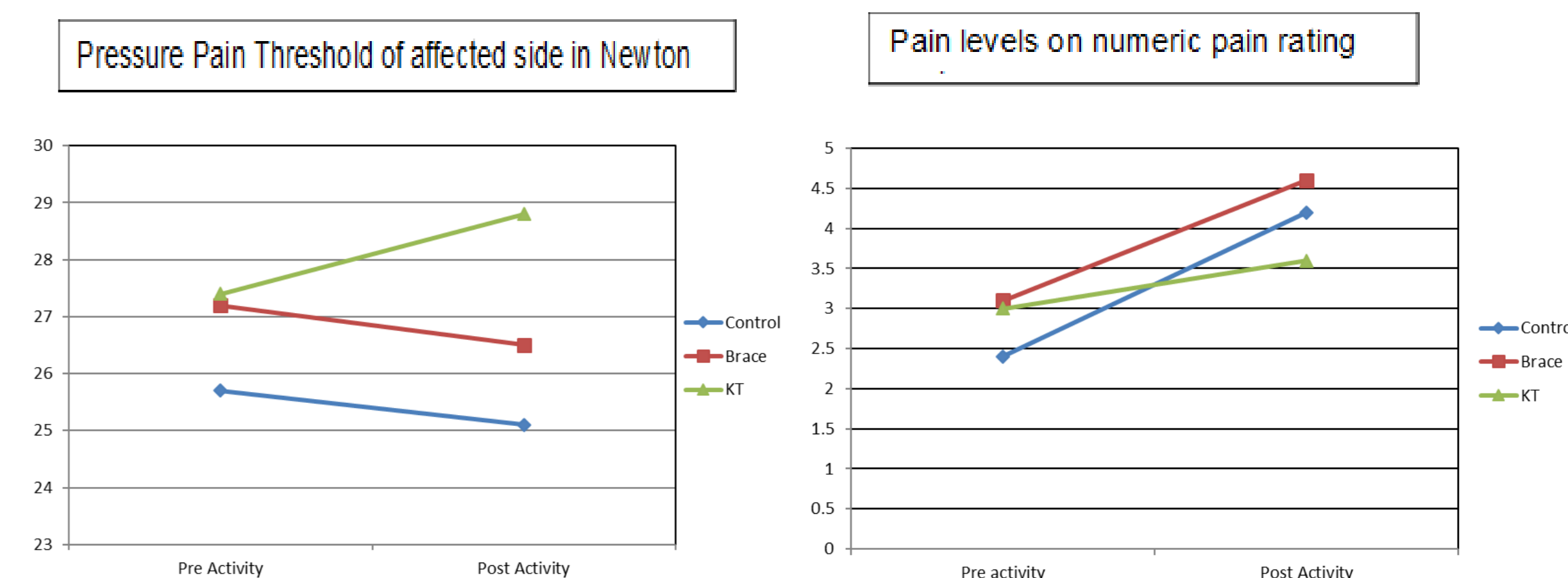


Pain free Grip strength of affected side in kgs



## RESULTS

- Improvement in PFGS with both bracing (2.3 kgs) and KT (4.3 kg) ( $p < 0.01$ ) immediately upon application.
- Decline in PFGS (2.2kg) and a concurrent increase in pain level following the activity with brace ( $p = 0.001$ ).
- No significant worsening after activity with KT.
- No change in PPT across all treatment and time conditions ( $p > 0.05$ ).
- Increase in pain levels with activity ( $p < 0.05$ ).
- 60% ( $n = 18$ ) of patients preferred KT over bracing.



## CONCLUSION

- While both bracing and kinesiotape reduced symptoms of LET at rest; only kinesiotape maintained pain-free grip strength strength after a repetitive standardized activity. Studies comparing these 2 interventions over longer periods of use are needed.

## REFERENCES

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