

IMMEDIATE STRUCTURAL AND CLINICAL EFFECTS OF A SINGLE-SESSION CMV6 TRACTION

Dong Wuk Kim, M.D, Jung ho Lee, M.D
 Department of Rehabilitation Medicine, Presbyterian Medical Center (Jesus Hospital)

BACKGROUND

Posterior-to-anterior vertical traction using the Ceragem Master V6 has shown clinical non-inferiority to conventional axial traction, but evidence on immediate effects after a single session remains limited. This study evaluated the immediate structural and clinical changes following a single CMV6 application.

Method

Thirty patients with degenerative lumbar conditions underwent a single CMV6 session. Clinical outcomes (VAS, SLR, Schober test) were assessed before and after treatment (n=30). Radiographic measurements were obtained before and during traction without repositioning (n=27). Structural parameters included anterior height, posterior height, and A/P ratio across lumbar levels.



fig 1. Ceragem Master V6(CMV6)

Result

1. Clinical outcomes

Significant improvements were observed in VAS and bilateral SLR, whereas Schober test showed no significant change.

Outcome	Before	After	Δ Change	p-value
VAS	6.33 ± 1.54	3.00 ± 1.74	-3.33	<0.001
SLR (Rt)	89.63 ± 11.44	93.60 ± 9.32	+3.97°	0.026
SLR (Lt)	94.63 ± 8.98	97.70 ± 7.91	+3.07°	0.003
Schober test	3.90 ± 1.14	3.92 ± 1.07	+0.02	0.563

Table 1. Clinical Outcomes Before and After CMV6 Application

VAS

Before [redacted] 6.33
 After [redacted] 3.00

Fig 2. VAS Scores Before and After Single CMV6 Session

2. Radiologic outcomes

Significant structural changes were observed, particularly in anterior disc height and A/P ratio.

Level	Anterior Δ (mm)	p-value	Posterior Δ (mm)	p-value
L2-3	+0.51	<0.001	+0.11	0.077
L3-4	+0.48	<0.001	+0.04	0.468
L4-5	+0.52	<0.001	+0.13	0.011
L5-S1	+0.61	<0.001	+0.19	<0.001
L2-S1	+2.11	<0.001	+0.47	<0.001

Table 2. Intervertebral Height changes

Level	Before	After	Δ Change	p-value
L2-3	1.98 ± 0.44	2.68 ± 1.32	+0.71	0.007
L3-4	2.18 ± 0.83	2.78 ± 0.93	+0.61	0.005
L4-5	2.69 ± 1.06	3.00 ± 1.10	+0.31	0.218
L2-S1	2.48 ± 0.55	2.85 ± 0.59	+0.37	0.002

Table 3. A/P ratio changes

A/P Ratio

L2-3 Before [redacted] 1.98
 After [redacted] 2.68, Δ+0.71

L3-4 Before [redacted] 2.18
 After [redacted] 2.78, Δ+0.61

Fig 3. Changes in A/P Ratio Before and After CMV6 Application

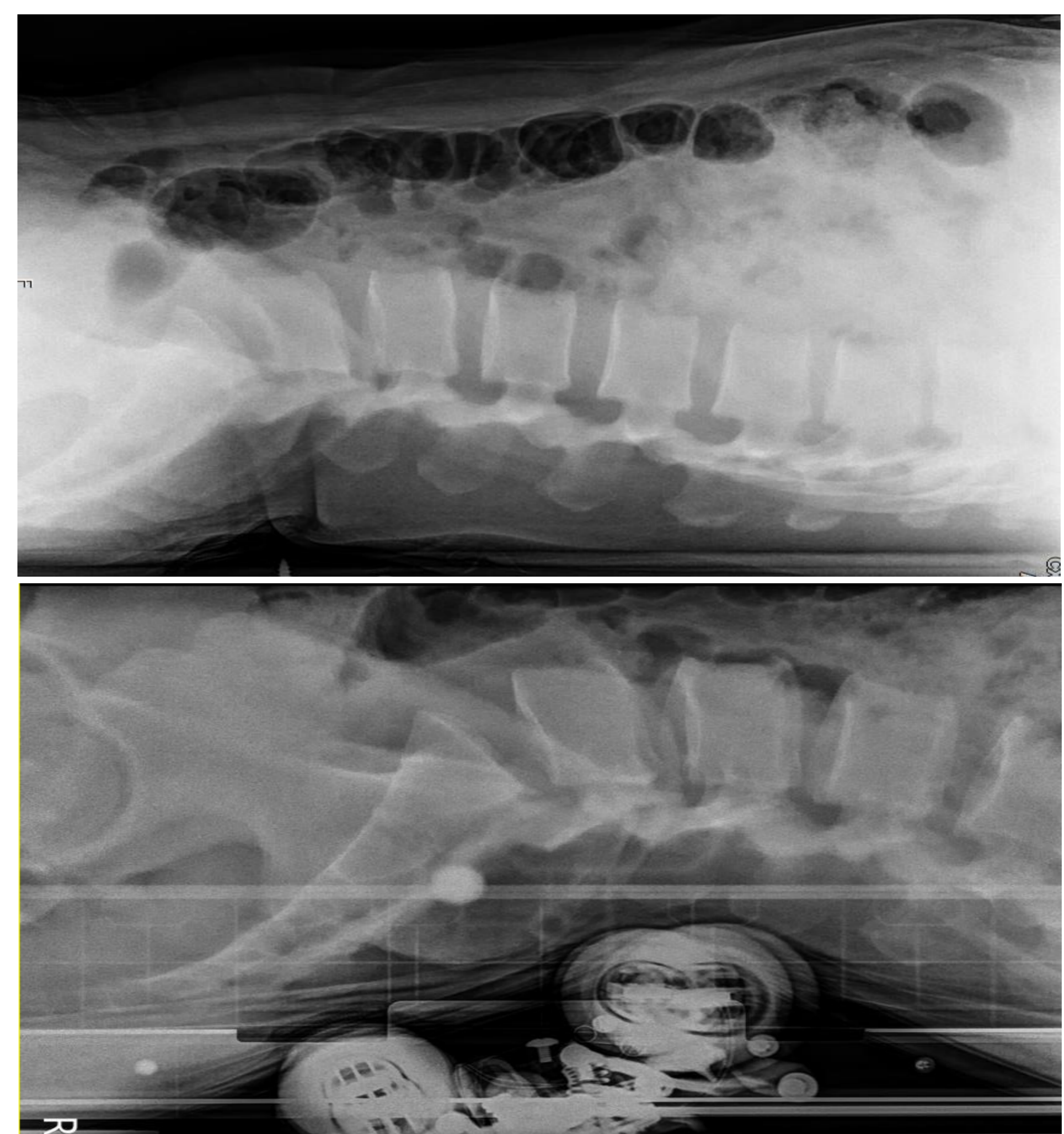


Fig 4. Lateral Lumbar Radiographs of the L5-S1 Segment Before and During CMV6 Traction

KEY MESSAGE

- A single CMV6 session significantly reduces pain
- Immediate structural changes were observed
- Supports a biomechanical basis for decompression

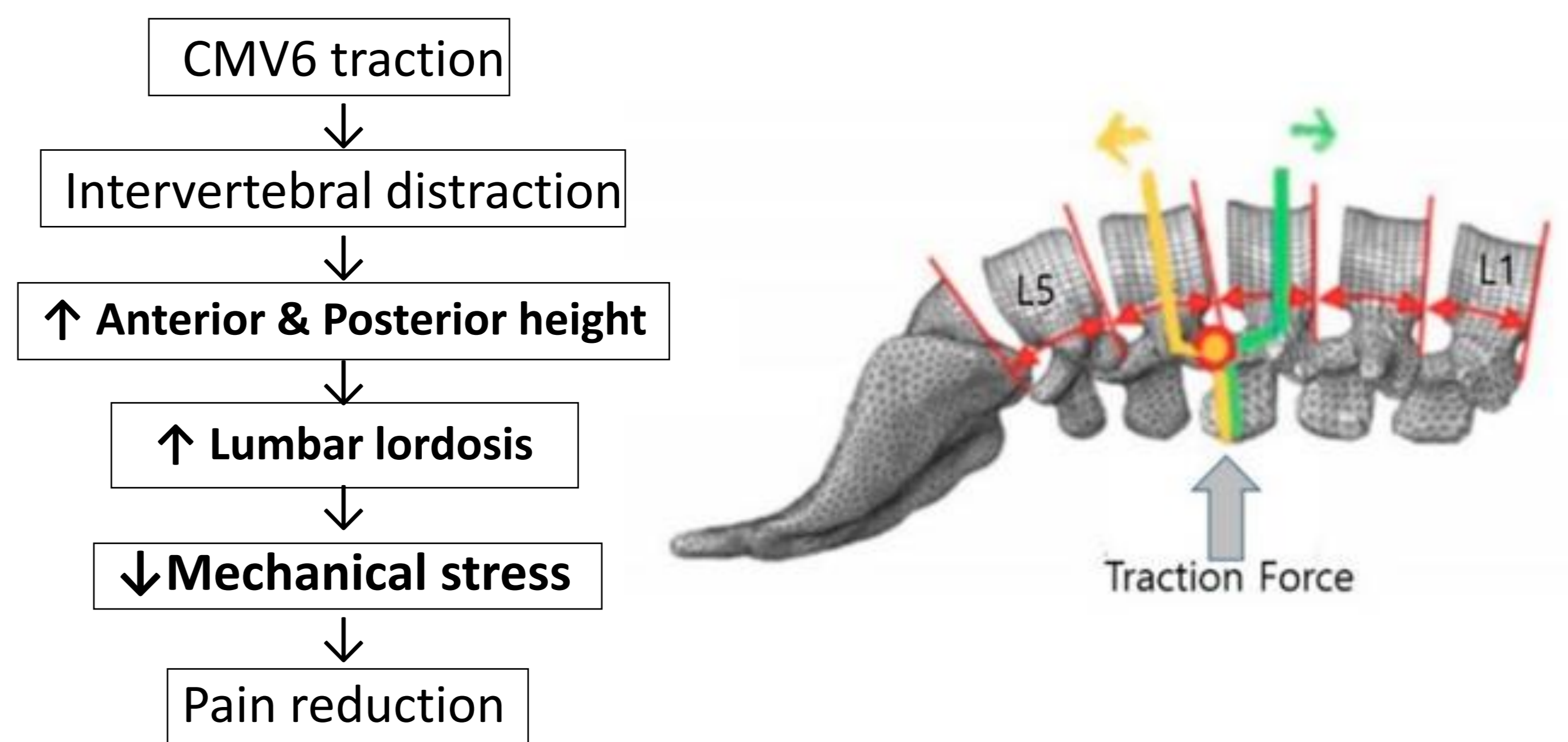


Fig 5. Proposed Mechanism of CMV6 Traction

DISCUSSION

A single CMV6 session increased disc height and A/P ratio, inducing decompression via a suction effect while improving lumbar lordosis, which contributes to pain relief and functional improvement.

CONCLUSIONS

A single CMV6 application produces immediate structural and clinical improvements, supporting its role as an effective decompressive therapy.

Reference

1Yoon YS, Lee JH, Lee M, Kim KE, Jang HY, Lee KJ, Bajgai J, Kim CS, Cho IY. Mechanical changes of the lumbar intervertebral space and lordotic angle caused by posterior-to-anterior traction using a spinal thermal massage device in healthy people.