Who Benefits From Lumbar Traction?

Reference: Fritz JM, et al Is there a subgroup of patients with low back pain likely to benefit from mechanical traction? Results of a randomized clinical trial and subgrouping analysis. Spine. 2007 Dec 15;32(26):E793-800.

Several past studies have confidently concluded that lumbar traction is useless! Regrettably, the studies failed to use common clinical sense.

Is it possible that a small sub-group of patients would actually find traction extremely beneficial?

Finally, here we have an RCT that identifies a subgroup of patients with LBP who are most likely to respond positively to mechanical lumbar traction.

Sixty-four subjects with low back and leg pain and signs of nerve root compression were randomized to receive either:

i) A 6-week extension-oriented intervention

ii) A 6-week extension-oriented intervention **with mechanical traction for the first 2 weeks**

Result #1: The traction group showed significantly greater improvements in disability and fear-avoidance beliefs scores after 2 weeks. But not at 6 weeks

Result #2: Two important variables were associated with better outcomes with traction treatment:

One: If they had peripheralization with extension movements and

Two: If they had a positive crossed straight leg raise test

Clinical Relevance: The ideal patient to traction should have:

- i) Leg symptoms below the knee
- ii) Signs of nerve root compression
- iii) Peripheralization during lumbar extension movements
- iv) +ve Crossed straight leg raise test (i.e. pain down the symptomatic leg while raising the asymptomatic contra-lateral leg

Comment from Bahram Jam, PT, (APTEI): Obviously this is one of the first studies looking at the variables associated with positive outcomes with traction, so more studies are needed to support or negate these findings. One thing is for sure, **we are on the right track** when it comes to research. **We are no longer attempting to prove the benefit of a single intervention on every individual with low back pain...**those previous studies were doomed for failure!

Credit for the above review: **Bahram Jam, PT, (APTEI)**