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Back-A-Traction®
The Swedish Back
Care System

Here are some important facts out of the studies :

A. Effects of sustained traction treatment

1. Increase of intervertebral space.
   Most of vertebral separation takes place during the first 30 minutes of traction treatment.
   The space in between two vertebrals increased with 1-1.5 mm; that's 10-15 % of the total thickness of the disc.
   Other studies mentioned that the traction force should be at least 25 % of the bodyweight to achieve distraction of the lumbar vertebrae, the inertia of muscular resistance of the body.

2. The posterior longitudinal ligament is tautened, exerting a centripetal force at the back of the joint.
   The increasing tension in this ligament is certainly of great therapeutic value, particularly if the protrusion is located anterior to and remains in close contact with the ligament.
   That's why traction is often used on median and posterolateral protrusions. If the protrusion is laterally placed, traction is not very effective.

3. Suction draws the protrusion towards the center of the joint.
   Discography has established that the decrease in intradiscal pressure causes a suction effect with centripetal forces on the contents.

4. Repair of disc lesion.
   It has also been suggested that during episodes of disc decompression nutrition is improved, reparative collagen is deposited and natural healing of annulus tears and fissures is promoted.

B. Indications for sustained traction

1. A nuclear disc protrusion
   A nuclear disc protrusion in contact with the posterior longitudinal ligament can be treated very well by traction.

2. Disc damage at level L1-L2
   Manipulation has no effect at this level, traction has.

3. Recurrence after laminectomy
   If the patient gets pain again after laminectomy, traction has a better effect than manipulation.

4. Primary posterolateral protrusion
   Here the protrusion exists out of nuclear material only and is treated best by traction.

5. Backache together with bilateral longstanding limitation of straight leg raising.
   Those affected are mainly young adults with months or even years of backache associated with marked bilateral limitation of straight leg raising. Daily traction has proved to be successful but only if it is continued for about 3 months. It may take at least a month before any improvement is noted.

Conclusions

Sustained traction has the same effect on the intradiscal pressure as prolonged bed rest, but much more strongly. A few hours' traction achieves as much or more than rest in bed for weeks. Although the latter can also bring about slow reduction of a nuclear protrusion, traction has the advantage of speed. Instead of simply avoiding the compression produced by the upright posture, it mechanically distracts the joint. In addition, the patient remains ambulant, greatly preferred to rest in bed for some weeks, which is not only bad for morale but also increases the cost in lost working days and the payment of sickness benefit.

It should be emphasized that this effect can only be achieved if traction brings about more in the way of reduction in half an hour than can be reversed during the rest of the day by new loading effects. To this end, traction should be sustained and must be given daily and as energetically as the patient can bear.

This info came out of following work :

Ombregt L., Bisschop P., Ter Veer H., J. and Van de Velde T., (1992), chapter 10, The lumbar spine, a system of orthopaedic medicine, p. 651-657, London, WB Saunders Company Ltd

The second person (Bisschop P.) is the one we would like to "engage" for the presentations.

Yours sincerely,

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