

Outcomes After a Prone Lumbar Traction Protocol for Patients With Activity-Limiting Low Back Pain: A Prospective Case Series Study

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- **This 2008 VAX-D study was supported by a grant from one the nations leading insurance companies, Independence Blue Cross.**
- **The goal of the study was measure outcomes with VAX-D in a prospective, longitudinal study using validated outcome measures of pain and disability on a large sample of patients.**
- **The purpose of the study was to determine short- and long-term outcomes after administration of the VAX-D protocol to a sample of patients with activity-limiting LBP that had been refractory to at least 2 bouts of previous, non-operative interventions.**
- **All subjects must have reported a lack of favorable outcomes after at least 2 previous, non-operative interventions (eg, joint manipulation, transcutaneous electric nerve stimulation, or oral medication) for their current symptoms**
- **The majority of subjects (n 234 [79%]) reported that their presenting symptoms of LBP were present for greater than 6 months.**
- **When ITT (Intention To Treat) strategies were used, significant improvements were noted for all follow-up measures of pain intensity compared with the pre-intervention measures ($P < .01$) Highest pain intensity was significantly lower at 180 days follow-up than at discharge ($P < .01$). The mean RMDQ score at 180 days follow-up was significantly improved compared with discharge ($P < .01$).**
- **In this prospective, longitudinal case series patients reported significantly improved**

pain and disability scores after 16 to 24 visits of prone traction at discharge, and at 30 days and 180 days post-discharge.

- If outcomes after VAX-D are superior to those after conventional traction or other equivalent interventions, investing in and reimbursing for traction provided by the VAX-D system may be cost-effective.

- It is important to note that VAX-D differs from most conventional lumbar traction in a variety of ways; the subject is positioned prone on a low-friction surface as opposed to supine on a high-friction surface; a pelvic harness is used as opposed to a thoracic harness; and the protocol indicates a high frequency of treatments over a 2-month period.

- In this study all subjects had pre-intervention imaging evidence of lumbar intervertebral disk degeneration and/or herniation.

- Subjects were included in this study only if they failed at least two (2) previous non-operative treatments for their LBP.

- The sample was primarily composed of middle-aged adults who were currently working and reported moderate to high pre-intervention pain intensity (range, 3.9 –7.3) and moderate pain-related activity limitation (mean RMDQ score, 12.6). Most subjects had symptoms of greater than 6 months in duration.

- VAX-D for 16 to 24 visits was associated with significant improvements in pain intensity and RMDQ scores in both short- and long-term follow-up, in patients with activity-limited LBP who had previously failed 2 non-operative interventions for their current symptoms.