



VAX-D is a non-invasive treatment for acute or chronic back pain and radicular pain and symptoms (leg pain and numbness) from herniated or degenerated discs and posterior facet syndrome. Patients who have had back surgery and continue to have pain (Failed Back Syndrome) may also benefit from VAX-D.

People who suffer from severe, chronic pain know how it can utterly disrupt one's life. Pain can make it hard to enjoy even the simplest daily activities, and make it a challenge to carry out an exercise routine and other healthy activity.

People often live a life of compromise in their activities. Many patients find that as they grow older, episodes of low back pain become more frequent, their pain worsens in intensity and it takes longer for them to recover.

There are many different terms to describe lumbar disc pathology. The terms include: annular tears, bulging disc, disc protrusion, slipped disc, herniated disc, ruptured or extruded discs, disc fragment, disc degeneration, pinched nerve, sciatica etc.

## **Genesis G2 Lumbar Treatment System**

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VAX-D Genesis treatment is designed to relieve the pressure on the structures that may be causing back pain generally associated with bulging or herniated discs and degenerative disc disease. A recent (2008) two year study sponsored by one of the nation's leading insurance companies demonstrated positive short and long-term results with VAX-D. Patients had significantly improved pain and disability scores at end of VAX-D treatment, at 30 days and at 180 days post-treatment.

Patients receive an average of 20 treatments, once a day, five days per week. The total number of treatments may vary depending upon the severity of the condition and the response to the treatment.

The patient is fitted with pelvic harness and lies face-down (or face-up) on the table; the upper body is positioned on the stationary portion of the table and is restrained by the patient holding on to adjustable handgrips, or by the use of passive arm-rest restraints.

The system applies tension in a smooth (patented) logarithmic time/force curve that allows the back and trunk muscles to relax.



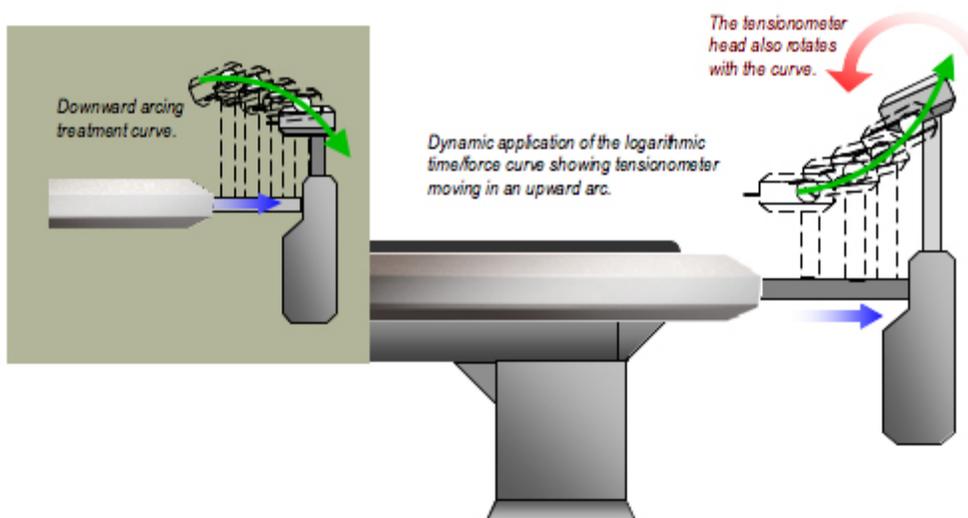
Each session is about 35-45 minutes in duration. Patients find the treatment to be comfortable and relaxing. Many experience a relief of their pain and symptoms during the treatment. For patients that must shorten their treatment schedule, treatments can be administered twice each day.

Patients with shoulder problems or who do not wish to hold on to the handgrips are now treated with the VAX-D Arm-Rest underarm posts. You can now take the treatment with your arms resting comfortably at the side.

The Genesis Software samples the tension and the position of the tension-source hundreds of times each second, and uses '**Bio-feedback**' to process the data. The system adjusts the tension and position to produce a perfect 'logarithmic' decompression curve (regardless of patient size, weight or body structure).

*Why do you need the tension applied logarithmically?* Going back to basic physiology, 'Fechners Law' tells us that the body's senses respond to the 'logarithm' of the stimulus (sight, sound, pressure etc). So in order to fool the muscle proprioceptors, and avoid muscle contraction, we apply the tension in a reverse logarithmic curve. The back muscles relax and the disc pressure can then be lowered.

**The Miracle of Technology • G2 Dynamic Performance:** The treating physician can choose to apply the tension to the patient, and have the tensionometer head move in a 'dynamic 'arc' or 'curve' while the tension is being applied. The tensionometer head can be programmed to follow a curve similar to the lumbar spine or cervical spine (see figure below). This is a unique and critical part of patient comfort when treating sore necks.



• **G3 Select:** The new G3 Select is a more affordable choice, where the vertical height adjustments are made manually. The G3 also treats both lumbar and cervical patients.

You can find a listing of VAX-D locations under the 'VAX-D Centers' section of the website. Contact one of the treatment centers listed for more information about the treatment and for information regarding your particular insurance coverage.

