Orthopaedics: New Answers for an Age Old Problem

Evidenced Based Emerging Technology

Acute low back pain (LBP) is one of the most common and significant musculoskeletal problems in the world. It is the cause of considerable suffering and disability, and the economic costs to patients, industry and governments are staggering. Back disorders now account for almost 30% of all occupational injuries. Recent studies reveal that the average cost of a workers compensation claim for LBP (in the US) is now close to $10,000 which is more than twice the average cost for all other compensable claims combined.

Even though this ailment usually has a benign course, it is responsible for direct health care expenditures in the United States of more than $25 billion annually, and as much as $100 billion per year when indirect costs are included. Despite these overwhelming statistics, the magnitude of the problem continues to skyrocket. Chronic low back pain is increasing faster than any other disability.

Experience in the last decade has shown that traditional management based on rest and passive care has been unsuccessful, actually promoting disability. A new treatment and model of care has now provided an answer for this age old problem. Intuitively, lumbar decompression should be successful in alleviating many of the conditions that cause low back pain and associated radiculopathy. Technology has finally provided the answer and discs and nerves can now be effectively decompressed non-surgically.

Emerging Technology

VAX-D or Vertebral Axial Decompression is an emerging technology that addresses the biomechanical aspects of disc disease and is now being widely used in the United States for chronic low back pain sufferers. Clinical studies done by the Departments of Neurosurgery and Radiology, Rio Grande Regional Hospital, McAllen, and Division of Neurosurgery, Health Sciences Center, University of Texas, San Antonio, Texas have documented VAX-D's ability to actually lower the intradiscal pressure to negative levels. Prior to the introduction of VAX-D the successful application of lumbar distractive forces has been limited by the technological design of ineffective traction devices.

An outcome study on 778 patients and prospective Randomized Controlled Trial (RCT) done at the University of Sydney in Australia both reported approximately 70% success rates and improvements in functional outcomes with chronic disc cases. A recent RCT (2004) conducted by Dr. G. Ramos, Neurosurgeon at HCA Rio Grande Regional Hospital in Texas has also published success rates of 70%.

In addition, several research studies have now been published examining the mechanism of action of VAX-D. Studies in Canada and the US have reported that lumbar nerve root decompression is achieved with VAX-D Therapy. VAX-D has a growing body of research publications which include several randomized control trials (RCT) conducted in the US, and RCT in Australia and many other studies examining the mechanism of action. All studies can be viewed at www.vaxd.com.