



ValleyCare

# Medical Spotlight

JOSEPH GRANT, M.D.

## New Research Offers Promise for Spine Patients

The Spine Program at ValleyCare and the surgeons at Northern California Spine Institute are perfecting new ways to treat degenerative conditions of the cervical and lumbar spine (neck and low back), that help preserve motion and avoid spinal fusion.

Thousands of spine fusions are performed in the United States every year for degenerative conditions that compress spinal nerve roots or the spinal cord.

Pressure on a nerve root causes radiculopathy, which results in extremity pain, weakness, numbness and tingling. Pressure on the spinal cord produces myelopathy (cord compression), which causes loss of power, coordination and overall function. Myelopathy progresses slowly over time, and eventually results in paralysis. Patients with these conditions normally experience clumsiness, tripping, and difficulty using their fingers for tasks such as buttoning and sewing.

Dr. Kevin Booth and I, in conjunction with ValleyCare, have been conducting clinical research to evaluate the effectiveness of surgical implants that maintain motion and avoid fusion.

Fusion involves placing a bone graft in the disc space and stabilizing with a metal plate and screws. Disc replacement (arthroplasty) utilizes

a mechanical implant to replace the worn out or herniated disc in the neck. This artificial disc for the neck has proven to relieve symptoms while preserving motion. We are also performing a similar procedure in the lower back.

Another area of our expertise involves laminoplasty, a procedure to expand the spinal canal. Spinal stenosis, a degenerative, or sometimes congenital, narrowing of the spinal canal, causes nerve or spinal cord compression. In the neck, it causes myelopathy. Patients have traditionally required extensive, multi-level fusions with removal of the vertebrae to relieve stenosis.

Laminoplasty simply expands the spinal canal instead of removing or replacing bone. No fusion is required and motion is preserved. Dr. Booth and I have developed a new device for laminoplasty that keeps the spinal canal open and is safer and easier for surgeons to apply, thus decreasing risk to patients. After recent testing, this device has been approved by the FDA and is now in use.

*Dr. Grant is a board certified orthopedic spine surgeon and is a provider and partner at the Northern California Spine Institute, 5725 W. Las Positas Blvd., Suite 200, Pleasanton, 925-469-6274.*



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