Spine Program Overview

Comprehensive, Advanced Spinal Care

At the Santa Rosa Memorial Hospital Spine Center, we believe in using the most advanced interdisciplinary approaches when diagnosing and treating disorders of the neck, back, spine, and spinal cord. Our innovative surgical and non-surgical interventions are recognized throughout Coastal Northern California as some of the most advanced in the region. These cutting-edge treatments allow us to provide care for a wide range of spine disorders and problems for adults of all ages.

The spine involves muscles, bones, and ligaments and is the most complex bone/joint system in the body. Because of this complexity, our expert team of neurosurgeons, leading spine specialists, and on-site neurosurgical nurse practitioners all work together to create a personalized treatment and rehabilitation program uniquely designed for your treatment needs.

As part of your treatment plan, we also provide a team of physical therapists, pain management specialists, and rehabilitation experts to give you the best, most advanced care possible.

If you are suffering from neck or back pain, let us show you how today's variety of innovative treatment interventions can help you get back on your feet and start feeling great again.

For more information about the Spine Center at Santa Rosa Memorial Hospital, please contact:

St. Joseph Health System - Sonoma County 1165 Montgomery Drive Santa Rosa (707) 546-3210 www.StJosephHealth.org

(Services page)

Advanced Treatments and Services

At Santa Rosa Memorial Hospital, our Spine Center offers some of the most comprehensive diagnosis and treatment options available for neck, back, and spinal disorders. In addition to our diagnostic imaging and surgical treatment procedures, we also offer pre-operative spine surgery instruction, care management, social service consultations, and personalized post-operative comfort management.

Our highly specialized neurosurgeons and spine specialists use the very latest in equipment and treatment procedures to provide you the fastest and safest recovery possible. We specialize in the following surgical procedures:

Minimally Invasive Spine Surgery

Minimally invasive spine surgery uses small instruments and sometimes a thin, telescope-like instrument known as an endoscope. These instruments are inserted through small incisions.

Small surgical instruments may then be passed through one or more additional half-inch incisions. Typically, minimally invasive spinal surgery allows for the same outcomes as conventional spine surgery but the incision is smaller which allows for a shorter recovery time and reduced postoperative pain.

Cervical

Anterior Cervical Discectomy and Fusion

A surgical procedure performed on the upper spine to relieve pressure on one or more nerve roots, or the spinal cord. This procedure removes a diseased disc (discectomy) through the front (anterior) of the neck (cervical). After the disc is removed, the spine must be stabilized. This is accomplished using a cervical plate and screws (instrumentation) and fusion (bone graft). Fusion is similar to glue that hardens over time to create a solid construct, which stabilizes the spine.

Anterior Cervical Corpectomy

This surgery is done through a small incision in the front of the neck. The purpose of this surgery is to remove damaged and/or diseased bone and discs from the cervical spine. When the bone and discs are removed, the pressure on the spinal cord and spinal nerves is relieved. A bone graft is then placed in the space and it is held in place by a small metal plate and screws.

Cervical Laminectomy

A surgical procedure which is designed to relieve pressure on the spinal cord or nerve root that is being caused by a slipped or herniated disk in the cervical spine. This procedure includes removal of a portion of the bone comprising a vertebra. A **Posterior Cervical Laminotomy** is a surgical procedure that is done on the back of the neck in order to relieve the pressure on a nerve in the neck. During this procedure, bone spurs or disc herniations are removed to take the pressure off the painful nerves Surgical instruments are also used to remove a small portion of the back of the spine (lamina).

Cervical Laminoplasty

When symptoms are severe or progressive, cervical laminoplasty surgery may be required to enlarge the spinal canal to relieve compression of the spinal cord. Surgical techniques used to perform laminoplasty surgery can vary and will depend on many factors, including the source of the spinal cord compression, the number of vertebral segments involved in the disease process, and the cervical alignment.

Cervical Foraminotomy

This surgery relieves neck and arm pain caused by compressed nerve roots from diseased discs. The surgery is done through a tiny incision in the back of the neck. The surgery removes bone and/or portions of the diseased disc.

Cervical Disc Replacement

Instead of fusing and eliminating movement in the joint space of the spine, the joint is replaced with an artificial disc, which allows for continued movement

Thoracic

Thoracic Laminectomy and Instrumentation:

A surgical procedure similar to the cervical laminectomy. This surgical procedure is designed to relieve pressure on the spinal cord or nerve root in the Thorasic (chest) area of the spine. Surgical instruments are used to remove the spinous processes and Lamina in the back (posterior). This relieves the compression on the spinal cord.

Thoracic and Lumbar Vertebral Body Replacement (Anterior)

This procedure is used to reduce the pressure on the spinal cord from either a tumor or a fracture. Surgical instruments are used to remove the broken or diseased bone. Then a metal cage is placed between the remaining bones to act as a support for the spine. Screws are placed in the adjoining healthy bones (vertebrae). The screws are connected together with metal rods.

Lumbar

Transforaminal Lumbar Interbody Fusion (TLIF) Posterior Lumbar Interbody Fusion (PLIF)

These spine fusion procedures allow the surgeon to fuse the front and back of the spine through one incision on the back. When performing these fusions in the lumbar spine, two or more vertebral segments are joined together, eliminating movement in the joints. These procedures are performed to reduce the pain caused by movement and the associated compression of the nerve roots. The TLIF and PLIF procedures can be **minimally invasive (should be emphasized)**, resulting in a reduction in the amount of muscle and skin that is damaged during surgery.

Anterior Lumbar Interbody Fusion

In lumbar interbody fusion with cages, the disk is removed and titanium cages filled with bone are inserted between the vertebral bodies. This maintains disk space height and fuses the joint, thereby eliminating abnormal movement.

Lumbar Disc Replacement

When conservative measures have failed, **fusion** of the joint has been the treatment of choice for relief of pain. Fusion, however, limits flexibility of the spine. With artificial disk replacement, a patient maintains flexibility. Disk replacement also eliminates the need to obtain bone from the hip associated with fusion procedures.

Lumbar Laminectomy, Fusion—Instrumented and Uninstrumented

The Lamina is the part of the vertebra located in the back of the vertebral body. A lumbar laminectomy is a surgical procedure that removes a part or all of the lamina. This is a bone in the back of the spine and sometimes, it can cause compression of the spinal nerves in the lower back (spinal stenosis). Removal of this bone, can relieve pressure on the spinal cord. Sometimes the spine segments also need to be fused together in order to stabilize the spine. This can be done with (instrumentation).and without (uninstumentation) surgical instrumentation).

Lumbar and Cervical Micro-Discectomy

The disc is a combination of strong connective tissues holding one vertebra to the next. This connective tissue acts as a cushion between the vertebrae. When the disc loses its effectiveness as a cushion, a displacement of the disc's center (called a herniated or ruptured disc) may result,

which can press on and irritate nerves. A surgical procedure called a discectomy or partial discectomy is performed and part of the herniated disc is removed

Other

Dynamic Stabilizations

Dynamic stabilization in the lumbar spine is performed in an attempt to reduce pressure across the intervertebral disc in order to relieve pain and limit degeneration, while preserving motion. Dynamic stabilization combines the surgical approach of traditional fusion with flexible materials that stabilize the spine and preserve anatomical structures.

Vertebralplasty/Kyphoplasty

A vertebral compression fracture (VCF) occurs when the vertebral body fractures and collapses. Balloon Kyphoplasty is a minimally invasive treatment in which special balloons are used to gently elevate the bone fragments in an attempt to return them to the correct position. Compared to the standard vertebroplasty procedure, kyphoplasty adds the introduction and inflation of the balloon. This provides the advantage of allowing the cement to be injected into the space created by the balloon under a lower pressure than would otherwise be required. Kyphoplasty also provides, in some cases, the ability to raise the collapsed vertebra and return it to its normal position.

X-STOP

The X-STOP procedure represents a new approach to treating the symptoms of lumbar spinal stenosis, a common spinal problem resulting from a narrowing in the lumbar spinal canal that carries nerves to the legs. As this space in the lower spine shrinks, nerves are squeezed causing debilitating pain in the back and legs. The X-STOP procedure is designed to limit the extension of the lumbar spine and keep the canal open in the lower spine that carries nerves to the legs, thereby relieving the pain associated with the narrowing of the canal.

After surgery, and throughout your stay at the Spine Center, you will receive specialized nursing care with certified neuroscience nurses. We also offer daily physical and occupational therapy sessions, a collaborative on-site hospitalist MD services, and one of the best acute and skilled rehabilitation centers in the region.

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Meet Our Experienced, Highly Qualified Team

Our Spine Center is run by an expert team of highly skilled and thoroughly trained neurosurgeons and spine specialists using state-of-the-art surgical interventions and equipment. Each of our surgeons has completed years of rigorous medical education and surgical training.

Because our approach is to find the right specialist with the right surgical or non-surgical intervention for your needs, we will take the time and care needed to carefully evaluate your condition and provide you with the best treatment options.

Take a moment to meet our team of highly qualified practitioners:

Alan T. Hunstock, M.D.

Neurosurgeon

Alan T. Hunstock, M.D., is a Neurosurgeon at Santa Rosa Memorial Hospital. Dr. Hunstock received his medical degree from the University of Oregon Medical School and completed an internship and residency at the University of California, Los Angeles. He completed a fellowship in neurology and neurosurgery at the University of London. This was followed by five years in neurosurgery training at UCLA.

Board certified in neurosurgery by the American Board of Neurological Surgery, Dr. Hunstock's professional affiliations include the Sonoma County Medical Association, the California Association of Neurological Surgeons, Western Neurological Society, the American Association of Neurological Surgeons, the Congress of Neurological Surgeons, the Spine and Trauma sections of the American Association of Neurological Surgeons, and the San Francisco Neurological Society.

Paul A. LaHaye, M.D.

Neurosurgeon

Paul A. LaHaye, M.D., is a neurosurgeon at Santa Rosa Memorial Hospital. Dr. LaHaye received his medical training from Tulane University, School of Medicine in New Orleans. He completed an internship at Parkland Memorial Hospital in Dallas, followed by five years of neurosurgical training at UCLA.

Board certified in neurosurgery by the American Board of Neurological Surgery, Dr. LaHaye's professional affiliations include the Sonoma County Medical Association, the California Medical Association, the American Medical Association, the California Association of Neurological Surgeons, the Congress of Neurological Surgeons, and the American Association of Neurological Surgeons.

Eldan B. Eichbaum

Neurosurgeon

Eldan B. Eichbaum, M.D., is a neurosurgeon at Santa Rosa Memorial Hospital. Dr. Eichbaum completed his medical degree at the University of California, San Francisco, where he also completed an internship and five years of neurosurgical training. He finished a fellowship in complex and reconstructive spinal neurosurgery at the University of New Mexico in Albuquerque.

Dr. Eichbaum's professional affiliations include the Sonoma County Medical Association, the American Association of Neurological Surgeons, the California Association of Neurological Surgeons, the Congress of Neurological Surgeons, and the American Medical Association.

Samir Lapsiwala, M.D.

Neurosurgeon

Samir Lapsiwala, M.D., is a neurosurgeon at Santa Rosa Memorial Hospital. Dr. Lapsiwala received his medical degree from the Pennsylvania State University, School of Medicine. After completing a general surgery internship and neurosurgery residency at the University of Wisconsin Hospital and Clinics, he completed a spine fellowship at The Cleveland Clinic Foundation.

Dr. Lapsiwala has received many awards including a Congress of Neurological Surgery/DePuy AcroMed Clinical Fellowship in Spinal Neurosurgery. The \$50,000 fellowship award is given for research in spinal neurosurgery. Dr. Lapsiwala's research has focused in biomechanics of the spine and neuro-oncology.

He has presented and published widely in the areas of spinal biomechanics, spine surgery, and neurosurgery.

John M. Grollmus, M.D.

Neurosurgeon

John M. Grollmus, M.D., is a neurosurgeon at Santa Rosa Memorial Hospital. He received his medical training from Washington University Medical School in St. Louis, Missouri and completed a surgical internship at Vanderbilt University Hospital. After serving as a flight surgeon at the U.S. Navy, School of Aviation Medicine in Pensacola, Florida, he finished a five-year residency in the Department of Neurosurgery at the University of California, School of Medicine in San Francisco.

Board certified by the American Board of Neurological Surgery, Dr. Grollmus has specialized training in degenerative lumbar spine synthes, minimally invasive lumbar fusion, cervical spine synthes, vertebroplasty, and acute neurospinal disorders.

Dr. Grollmus has published extensively on spinal and neurological issues. His professional affiliations include the American Association of Neurological Surgery, the Congress of Neurological Surgeons, the American College of Surgeons, and the Society of Neurological Sciences.

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(For Patients page)

Pain Management

Our Pain Management Center at Santa Rosa Memorial Hospital encompasses an experienced and dedicated team of professionals skilled in the treatment and management of a wide variety of acute and chronic pain issues. The goal of our physicians and nurses is to help you achieve as pain free existence as possible, while maintaining as high a level of normal function.

Because we recognize that every individual is different, we will customize your pain management treatments to fit your unique personal needs. At the Pain Management Center, we encourage you to be a partner in your treatment by asking questions and sharing concerns. We will listen closely, discuss your treatment options, and then develop a treatment plan designed specifically to support your healing from pain caused by accident, illness, or a degenerative medical condition.

Rehabilitation

The Acute Rehabilitation Program at Santa Rosa Memorial Hospital offers medical rehabilitation, rehabilitation nursing, and therapies designed to restore a person's capability to care for him or herself following a serious injury or illness. Individualized treatment plans that include a series of exercises, training, and education are created by a highly skilled team of rehabilitation experts. You will learn to transfer, walk, dress, eat, toilet, communicate, and problem solve so you can safely return to the community. Caregiver education and training are also important parts of our treatment plans.

Excellent Results

When compared to national standardized measures, our Acute Rehabilitation Unit achieves excellent results, far above the national average. These results are based on how much improvement is made on a daily basis and how soon you can return home. The program excels on both of these measures. Once home, you will continue your recovery through home health and outpatient rehabilitation services.

Expert Care

Under the direction of a board-certified physician specializing in rehabilitation (physiatrist), our treatment team includes rehabilitation nurses, occupational therapists, physical therapists, dietitians, respiratory therapists, speech-language pathologists, psychologists, a social worker/case manager, an orthotist, and other specialties as needed. Treatments take place in an active atmosphere using state-of-the-art technologies.

A Healing Atmosphere

The unit provides a relaxed setting ideal for healing the mind, body, and spirit between treatments. Staff are available to help you with concerns, and fellow patients offer support and encouragement during group activities.

Self-Determination is Essential

The physician, therapy staff, and rehabilitation nurses make certain that you and your family fully understand your injury or illness. Our rehabilitation staff will work closely with you to identify the most effective treatment goals. Your active participation, along with teaching and training techniques, will help determine the best outcome.

Simple Referral Process

The Acute Rehabilitation Unit of Santa Rosa Memorial Hospital welcomes referrals. Hospitals and physicians will find the process is quick and easy, designed to access care for their patients as soon as possible. Every effort is made to quickly answer questions about bed availability and patient admission criteria. Tours of the facility can be arranged, and questions are always welcome.

"This rehab center is wonderful. The therapists work me hard but I've gained so much in just a week and a half. I didn't think it would happen. They don't push me if I am feeling weak, they let me rest, and then they ask me to try again. They throw themselves into it. I've never been in a rehab where people, both therapists and nurses, are so dedicated to their job."

To find out more about our Pain Management and Rehabilitation services, please contact:

Resources

You may find the following organizations useful in your treatment and recovery. Santa Rosa Memorial Hospital neither endorses nor is responsible for the content in any way.

The National Spinal Cord Injury Association Spinal Cord Injury Information Network SpineSection.org Cervical Spine Research Society North American Spine Society North American Spine Society International Hyperhidrosis Society International Hyperhidrosis Society www.understandingspinesurgery.com. North American Spine Society Cervical Spine Research Society Scoliosis Research Society International Spinal Injection Society American Academy of Pain Medicine American Pain Society American Academy of Physical Medicine and Rehabilitation American Academy of Orthopaedic Surgeons American Association of Neurological Surgeons

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