Kansas Spine Institute, LLC
REPORT

LOW BACK PAIN: Making the Call

Back and neck pain are ubiquitous within our society and are frequently expressed symptoms of patients presenting to internal medicine and primary care practices. Thoracic pain, although a less common problem, is not rare. Interventional Pain medical specialists are consulted to provide expertise in regards to diagnosis and treatment of spinal pain. Questions arise as to when, in the course of management, such a consult might be considered. This narrative addresses this query, although the specifics vary widely.

Any significant low back, thoracic or neck pain with a VAS (visual analogue scale) of ≥4/10, or pain interfering with age appropriate activities of daily living (ADL), would be an appropriate candidate to be evaluated by an Interventional Pain specialist. Such a consult is often considered prior to sending patients to a neuro- or orthopedic spine surgeon, so that a specific diagnosis can be sought.

When is consultation to "Pain Management" for back and neck pain appropriate?

In regards to mild to moderate axial, somatic pain, with or without referral, two to three months of conservative care is medically appropriate in that a large majority of patients will see significant relief due to the natural history of the disease. During this "waiting period", more severe pain is addressed with NSAIDs, non-opioid analgesics, low to moderate PRN opioid medications, muscle relaxants, and possibly a single "round" of non-aggressive physical therapy modalities to maintain functionality.

When conservative therapy has failed to benefit axial pain for 2-3 months, a consult with the Interventional Pain specialist is medically appropriate and should be forthcoming.

The quality of axial, mechanical, somatic pain is usually described by the patient as deep, dull, achy, and sharp with movement, grabbing, cramping, spasms, with ill defined margins, and the patient can usually identify a centroid. In these patients, imaging studies are not required during the initial phase of treatment unless infection, fracture or metastasis is suspected. However, prior to an appointment with an Interventional Spine Pain specialist, a high quality MRI is required. Low field strength MRI which is characteristic of open scanners and older machines is not appropriate in that image quality lacks conspicuity resulting in often unreliable interpretation. If the patient has a history of past surgery in the region of the pain complaint, or infection is suspected, imaging with and without gadolinium is preferred. If there is a contraindication to the MRI (i.e. pacemaker, etc), a CT scan is acceptable. Soft tissue of the central spinal canal is often difficult to evaluate on CT, and is best imaged following administration of contrast into the intrathecal space(myelogram). In that well trained Interventional Pain specialists are trained to perform,

—continued on page 2

Practice of interventional spinal diagnostics and minimally invasive treatment of spinal origin pain.

and interpret, myelograms, a consult for this procedure might be considered along with a request to "evaluate and treat as appropriate."

It is important to remember that MRIs and CT studies identify pathology, but do not identify a specific pain generator. They do, however provide clues as to possible structures which are known to cause pain, and in addition may evidence pathology which would make certain interventions life threatening. Reading radiologists rarely examine the patient and pathology is routinely reported that has no clinical correlation. The trained Interventional Pain specialist will evaluate the patient and then provide an independent interpretation of the imaging study. The history, symptoms, signs, and imaging are then all considered to provide a rational diagnostic and treatment algorithm.

Interpretations of imaging studies: lumbar thoracic and cervical degenerative disc disease, bulging disc, herniated disc, spinal or foraminal stenosis, spondylytic changes, or facet hypertrophy, mean little unless it can be correlated with the patient's symptoms and physical examination. Many of these imaging based diagnoses, are normal maturative changes found in a majority of asymptomatic patients over the age of 40. Pathology does not indicate pain. Treatment is directed at the index pain, not clinically irrelevant pathology.

It is well evidenced in the spine literature, that the three major chronic low back pain generators that can be objectively diagnosed are the facet (zygapophysial) joints, the intervertebral discs, and the sacroiliac joints, accounting for 70-80% of low back pain. Chronic neck pain is due to the "Z" joints or intervertebral discs also about 75% of the time. It is also well known that these diagnoses cannot be made by imaging or physical examination, but require precise, selective injections to validate their presence. Well trained Interventional Pain specialists have the skills and knowledge to make an accurate, and objectively determined diagnosis.

One commonly overlooked symptom of cervical spine pain is headaches into the occiput, especially after trauma such as motor vehicle accidents. In >50% of cases, these have been shown to be due to C2-3 involvement. Diagnosis has been shown to be reliable and valid, and a treatment providing on average 15 months relief has been well established in the spine literature, and can be repeated with the same excellent results.

Axial, somatic low back pain is a completely different entity from radicular pain. Rather than a somatic, mechanical problem, radicular pain is neuropathic, i.e. due to intrinsic pathology of the spinal nerve or dorsal root ganglion. Lower extremity radicular pain is described as "shooting, electrical, lancinating", it is felt distally in the extremity, has a band like pattern, appears to be quaisi-dermatomal, and there is often a cutaneous component. For the most part, radicular pain evidences a much higher intensity than somatic pain, and is unresponsive to opioids. Radicular pain is a separate diagnosis from radiculopathy which requires one to evidence a neurological deficit (motor, sensory, or deep tendon reflexes), on physical examination. Radicular pain is much less common than somatic, axial low back or neck pain. For every 100 patients seen with spinal pain complaints, only 15 will have radicular pain.

However, all pain radiating into the extremities is not radicular. Referred pain due to neural convergence is commonly noted with somatic, mechanical pain. It often takes an experienced Interventional Pain specialist to differentiate radicular from referred pain.

Whereas conservative therapy is indicated for a patient with mechanical, axial, somatic pain, if a patient presents with severe radicular pain, an MRI and consult to an Interventional Pain specialist should be sought in a more urgent time frame. Epidural corticosteroids, by the interlaminar or transforaminal approach can provide relief, and the literature indicates that the sooner this is done, the better the outcome. These injections are not analogous to the anesthesia provided epidurals, and strict standards in regards to Interventional Pain specialists have been published and when observed assure safety and efficacy.

With radicular pain, the MRI will evidence either a herniated disc (protrusion, extrusion, or sequestration) , or foraminal stenosis in >95% of cases. In the younger age group disc pathology will predominate, while in our more mature population spondolytic changes will be more common. As with axial somatic pain, the MRI must be correlated with the signs and symptoms.

Even if the patient has severe radicular pain, a consult with an Interventional Pain specialist should be considered prior to surgery, unless there are marked or progressive neurologic changes, e.g. cauda equine syndrome.

AXIAL PAIN

For somatic, axial, low back or cervical pain:

- Conservative care for 2-3 months

If pain continues:

- MRI or CT Myelography if MRI contraindicated
- Interventional Pain consult for diagnosis and treatment

RADICULAR PAIN

For pain radiating into distal extremity:

- MRI or CT Myelography if MRI contraindicated

If pain continues:

- Interventional Pain consult for diagnosis and treatment

Meet... Sabrina Nichols, *Clinical Coordinator*

Drs. Rodney Jones and Milton Landers are pleased to announce their new Clinical Coordinator, Sabrina Nichols. Sabrina is a registered nurse with over eight years of practice experience in the Interventional Pain Management field. She has provided exceptional patient care at Midwest Surgery Center for the past seven years where, for the past four years she was the Operations and Nurse Manager. With her considerable nursing and management accomplishments, patient centered care focus and drive to offer patient access to the best possible interventional pain care, Pain Management Associates is proud to have Sabrina as their new Clinical Coordinator.

The doctors and staff of Midwest Surgery Center, Pain Management Associates and Kansas Spine Institute appreciate all your patient referrals. They have assembled what they believe to be one of the best facilities in the world for the diagnosis and management of chronic pain of spinal origin. Exceptional communication between offices is their goal in order to minister to your patient's needs. With Sabrina as the Clinical Coordinator, working closely with your office, continued outstanding service and world-class patient care is the goal. The center offers diagnostic and therapeutic interventions relating to multiple sources of pain with emphasis on pain of spinal origin. All spine interventions are performed utilizing state of the art digital x-ray equipment. The center is single specialty where all the support and medical staff are trained and experienced in providing the ultimate level of quality and results.

If you have any questions in regards to interventional pain procedures for your patients, please call and discuss your patient's needs with Sabrina at 316-733-9393. She will work with you to accommodate your patients in a friendly and expedient manner in order to provide individual attention and the best interventional pain care possible. ●

The Kansas Spine Institute Staff

Kansas Spine INSTITUTE LLC
WichitaPainManagement.com

Office: (316) 733-9393 • Fax: (316) 733-6116
825 N. Hillside, Suite 220 • Wichita, KS 67214

Providing world class interventional spinal diagnostic and treatment services in a compassionate state of the art environment.

Rodney Jones, M.D. is a private practice Interventional Pain Management physician who has worked in the Wichita area for over 25 years. He is board certified by the American Society of Anesthesiologists (ASA) and holds Added Qualifications in Pain Management by the ASA. He is a Fellow of Interventional Pain Physicians (FIPP) by the World institute of Pain and is a Diplomat of the American Board of Interventional Pain Management Physicians.

JONES

He has experience in Addiction Medicine and is a Diplomat of the American Board of Addiction Medicine (ABAM). Currently, he is an Assistant Clinical Professor in the Department of Anesthesiology, University of Kansas at Wichita. He is past Chair, Department of Anesthesiology, Via-Christi St Francis, Wichita. He practices with Pain Management Associates in Wichita and he is Vice President of The Kansas Spine Institute. He instructs nationally and internationally on interventional spinal procedures including spinal cord stimulator and intrathecal drug infusion pump implant for the International Spine Intervention Society (ISIS) and the American Society of Interventional Pain Physicians (ASIPP).
Dr. Jones has served as an advisor to the American Medical Association Relative Value Update Committee for ISIS regarding interventional pain procedure payment recommendations to the Center For Medicare Services (CMS). Also he represents Interventional Pain Management on the CMS Carrier Advisor Committee.

Milton H. Landers, D.O., Ph.D. has distinguished himself in both academics and private practice, bringing to Wichita an international reputation and extensive experience in the specialty of interventional pain medicine.

Originally from San Jose, California, Dr. Landers' career has taken him across the United States. He earned his B.S. degrees in Philosophy and Biology and an M.S. in Biology from the University of Oregon with an emphasis in genetics. He continued his education at the University of Vermont with a Ph.D. in Zoology-Cell Biology.

In 1984, Dr. Landers earned his Doctorate of Osteopathic Medicine from the University of Health Sciences in Kansas City, Missouri. He is board certified in both Anesthesia and Pain Management from the American Osteopathic Board of Anesthesiology.

LANDERS

From 1987 to 1990, Dr. Landers was stationed at Elmendorf AFB in Alaska where he served the United States Air Force as Staff Anesthesiologist and Chief of Anesthesia Services.

Professionally, he actively served as president and board member of the International Spinal Intervention Society (ISIS). He is a well recognized international lecturer and instructor of spinal interventional diagnostic and therapeutic procedures. He holds the academic rank of Clinical Professor in the Department of Anesthesia at the University of Kansas, School of Medicine-Wichita.

For referrals or more information contact:
316-733-9393 • www.WichitaPainManagement.com