

Conquering Chronic Pain 69

Ira Fox, MD, DABPM, FIPP, discusses interventional pain management, a new medical discipline that tackles pain from the site of injury.

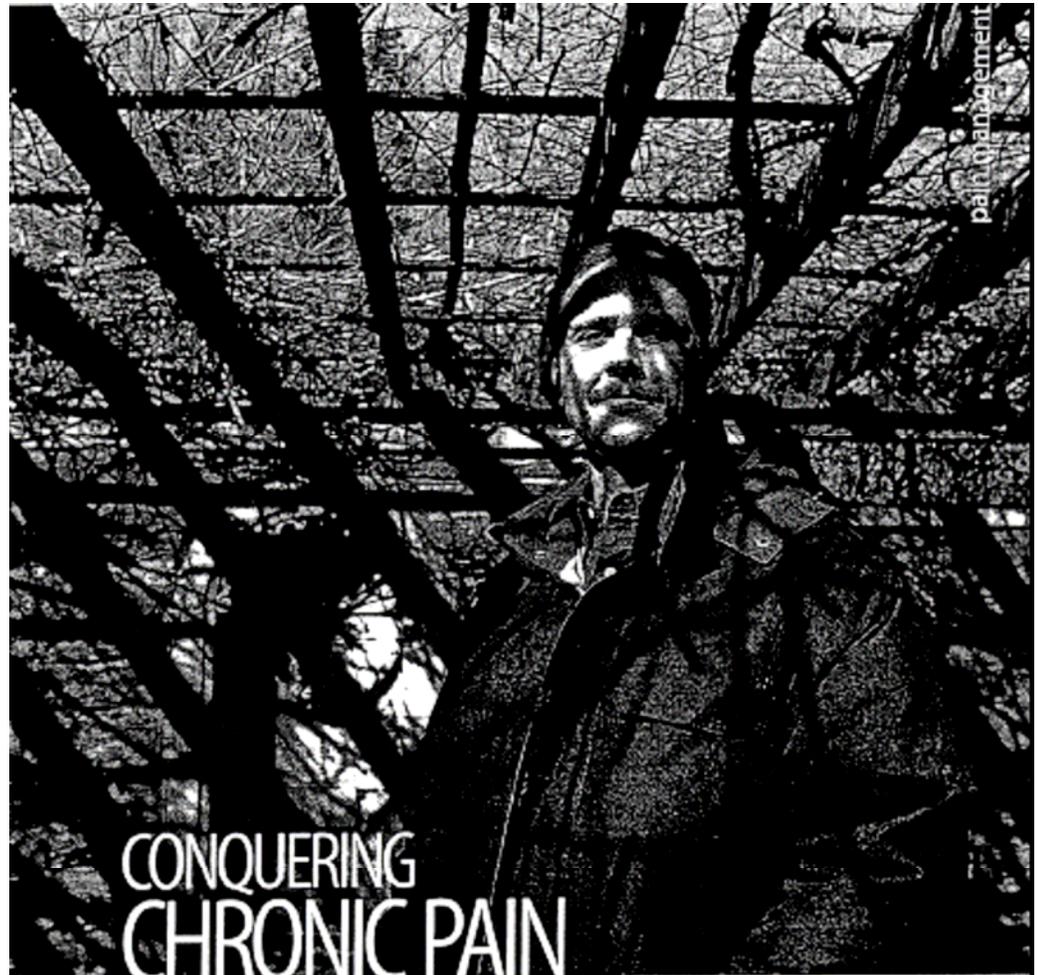
Conquering Recurrent Pain

Minimally invasive procedures dramatically reduce or eliminate pain altogether

By Ira Fox, M.D., DABPM, FIPP

Anyone who has lived in the shadow of chronic pain may be skeptical that any treatment will work. People who have suffered for years in discomfort have claimed to have tried everything. Physicians often share their frustration, especially after recommending treatments with minimal improvement.

A new medical discipline – interventional pain management – tackles pain from the site of injury and can make a significant difference. Using techniques such as radiofrequency, epidurals, Botox and fluoroscopy to find the source of pain and eliminate it, interventional pain physicians can treat a host of aches and pains. These treatments are especially useful for the back, neck, shoulder, arms and buttocks and target the



degenerative problems in the 50-plus population.

An Emerging Field

Interventional pain specialists use MRIs, X-rays and physical therapy to determine different sources of the pain. The interventional techniques can confirm or disprove previous diagnoses and provide immediate respite. For example, interventional pain specialists commonly use a

diagnostic tool that gives insight not only into the origin of pain, but also provides specificity for the necessary treatment. This method, known as fluoroscopy, allows physicians to view an image in real-time and adjust needles placement to inject medicine at the pain source. With fluoroscopically guided injections, physicians can inject small quantities of a local anesthetic at the site. These injections may provide

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remarkable relief, but they also provide valuable diagnostic information. If the patient feels immediate relief, we have strongly suggestive evidence that the area we inject is the primary pain generator.

Using this diagnostic tool, physicians can provide more effective treatments. In fact, we can find a precise location to administer relief. For example, we may inject drugs, such as small amounts of corticosteroids, to help reduce inflammation in the affected area.

Through this clinical series of treatment algorithms, interventional pain physicians have successfully reduced the severity of pain, its duration, and sometimes, eliminated it altogether.

On The Cutting Edge

Interventional pain physicians also use radiofrequency (RF) waves to eliminate pain, especially in the facet joints. RF energy generates heat that eliminates the nerve endings that sense the pain and renders them nonfunctional. The heat generated at those sites creates a lesion that disrupts the pain transmission to the joints. While it brings swift pain relief, the RF procedure doesn't destroy the nerve sheath that protects the nerves. Thus, nerve endings can grow back and remain properly oriented, although this process can take months and cause some discomfort. If pain comes back, physicians can repeat this RF procedure. Relief may last for months or permanently.

Change Agents

As America's demographic shift and the greatest population segment ages, health care practitioners need to come up with better ways to treat debilitating chronic pain. Various organizations, including the World Institute of Pain and the American Society of Interventional Pain Physicians, are doing just that, incorporating new methods into mainstream medicine. They're also instituting change. The American Society of Interventional Pain Physicians, for instance has most recently been instrumental in forming important legislation. In March 2005, the Centers for Medicare and Medicaid services mandated that Interventional Pain Management become the 34th medical specialty represented on state Carrier Advisory Committees, which make local decisions about Medicare coverage. This expands resources and coverage for patients who are seeking reimbursement for pain treatment.

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This procedure, known as radio frequency lesioning, is especially useful for chronic cervical and lumbar pain. The physician uses the fluoroscope to pinpoint the location of pain and uses electrodes that have an insulated shaft with an uninsulated top. These electrodes are connected to a radiofrequency generator that can heat or destroy specific pain fibers, denervating the cause of pain.

The patient is sedated for this minimally invasive procedure. The physician applies the RF signal for about 90 seconds per procedure, although the entire procedure lasts about 45 minutes. Some patients may require multiple treatments of the RF energy.

We often use this procedure on facet joint in the cervical or lumbar spine, a common cause of pain. We also use RF for neck and back pain, as well as commonly referred pain in the upper and lower extremities.

Patients may require on to four weeks to completely recover after an RF procedure, but can resume ordinary activities within days. Ideal candidates for RF treatment are those who are receptive to local anesthetic blocks.

Not Just for Labor

An epidural has long been associated with women in labor, but injecting medication directly into the epidural space can also help treat patients with neck, arm, lower back or leg pain. Epidurals are one of the more common procedures recommended for pain relief.

The process involved in epidural injections is fairly straightforward. The skin is numbed with a local anesthetic; the physician positions the epidural space that will provide the most relief.

The physician uses fluoroscopy, along with contrast dye for more precise injection, especially since the physician's technique can greatly affect outcomes. The entire procedure takes less than a half an hour, with under an hour of recovery

time, and patients can return to full activity the next day.

We use this minimally invasive procedure for herniated disks, sciatica and spinal inflammation. This option often eliminates the need for surgery that would otherwise be part of treatment for these causes of pain.

Physicians may recommend epidural neuroplasty, also called the lysis of adhesions procedure. In addition to depositing steroid in the epidural space, this advanced procedure attempts to either chemically or mechanically disrupt adhesions or fibrous scar tissue that may have formed as a result of prior or ongoing inflammation or previous spine surgery. Using a catheter as well as an injection of the enzyme hyaluronidase, physicians perform the lysis procedure by opening up the scar tissue. By doing so, they can ensure that subsequent steroid injections reach the targeted area more effectively.

Another common region of the spine that produces lower back and possible lower extremity pain is the sacroiliac joint. Thus a sacroiliac joint injection is also effective to treat pain in the lower back, buttocks, abdomen, groin and legs. At the base of the spine, the sacroiliac joint connects the sacrum to the pelvis. Injury and disease to these joint will cause pain. By injecting this joint with local anesthetic and steroid under X-ray guidance, physicians can reduce inflammation and swelling inside the joint spaces. In addition, injections may be repeated to produce long-term relief.

Botox for Pain Relief

Botulinum toxin (Botox) injections have become a common practice among dermatologists as a well-accepted technique for removing facial wrinkles.

However, we can also use Botox in conditions marked by muscle overactivity, including dystonia and spasticity. Botox injections gradually relax muscle spasms. The patient feels relief approximately one to two weeks after the procedure. The spasm reduction lasts for three to four months, and pain relief can last even longer.

Physicians can use Botulinum injections (Botox or Myobloc) to treat muscle contraction headaches, chronic muscle spasms in the neck and back, and torticollis (severe neck muscle spasms). Therefore, people suffering from muscle pain can rely on something more effective and longer-lasting than a massage. Botox also has some potential in treating more serious problems, such as myofascial pain syndrome and spasticity from multiple sclerosis or stroke.

The procedure is frequently administered in the doctor's office, but can be applied under sedation at an outpatient surgery center, depending on the size and location of the muscles involved, as well as the patient's personal preference. Physicians use fluoroscopic visualization to guide them. The Botox essentially blocks nerve signals to the muscle, thus causing relaxation of the piriformis muscle, which is located under the buttocks region. This muscle sits over the sciatic nerve, which can cause sciatic pain when the muscle is in spasm. Relieving

the spasm can help eradicate the pain.

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Longer Working Careers

Interventional pain care through minimally invasive procedures has been a major asset for workers' comp claims. These procedures have provided tremendous relief and have allowed workers to return to the job with greater speed and less pain. Older workers now comprise a substantial portion of the workforce, particularly in warm climates, such as Florida and Arizona. Therefore, claims from workers well beyond 50 are not uncommon and, in fact, older workers may be more susceptible to work-related injuries.

Physicians should use interventional pain strategies to identify and treat the source of pain in these patients and all aging baby boomers. The main goal in this approach should be to help patients achieve a window of opportunity to move on to some type of rehab program. There is no real danger in masking pain under these circumstances. Because patients are in less pain, they can undergo physical therapy more readily and take action against recurrence by maintaining their improved condition. ■