

Relieve Pain With PRP Therapy, Ultrasound, and Other Treatments

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For many years, there were four vital signs: temperature, heart rate, blood pressure, and respiration. But about 10 years ago, many in the medical profession began using a fifth vital sign: pain. While pain levels are subjective, patients in pain are now asked to rate their pain from zero to 10, with 10 being the worst.

Identifying patients' pain levels is good, but this may have contributed to an increase in prescribed pain medications, rather than working to cure the pain's underlying cause.

"We prefer to find a method that controls or eliminates somebody's pain without the use of those medications on a long-term basis," said Dr. Ben Zolper of Northeast Pain Management.

NPM's mission is "to provide the highest quality of interventional pain and minimally invasive spine surgery services," according to its Web site. "We provide care at all times and a cure where possible."

NPM does many on-the-spot X-ray-guided procedures to relieve spinal pain, disc-related pain, joint pain, and arthritis, with a focus on identifying the sources of pain. X-rays work fine for many spine and joint injections, but when it comes to soft tissue, ultrasound is an important diagnostic advance.

HOW NORTHEAST PAIN MANAGEMENT WORKS

First, NPM doesn't do medication management. "That's not our thing," said Zolper. "We're trying to get you away from the narcotics."

Second, your physician must refer you to NPM. "We think the family doctor, the internist, the orthopedic surgeon, the rheumatologist, or the neurosurgeon is the best judge of whether you will benefit by seeing me," said

Zolper, noting that your doctor is also the best judge of whether you've done the conservative things that you need to do first.

Conservative care is comprised of the basic things anyone should do when healing: give it time, have plenty of rest, use physical therapy, and don't exceed your limits. Most people will get better without needing specialized pain management, but for those who have gone months or even years without results, pain management may be the answer.

Once a patient has been referred, the NPM staff conducts a thorough history and a physical exam, and reviews all relevant tests to decide which approach will work best. In some cases, they'll use ultrasound to find the reason for the pain.

Zolper has plenty of experience in his field, initially working in Bangor starting in 1993 in anesthesiology and pain management. He opened NPM in 2003, and makes it a point to note that he hasn't administered anesthesia to anyone since 2000.

"My thinking is, drugs are good when they're the right thing for the right person and the right circumstance," he said. "But sometimes they're overused."

PLATELET-RICH PLASMA THERAPY

While NPM has many effective pain-management treatments and therapies, one of the newer and most exciting is platelet-rich plasma therapy, which is ideal for cases where a patient just isn't healing when he should be.

"If you have somebody with a chronic injury that's not healing, the basic question would be 'Why, in this person, did it not heal, when [in] maybe nine out of 10 people it does heal?'" said Zolper. "And I think ... you can give their natural healing system a kick start using materials from their own body."

Using the patient's own cells,



PHOTO COURTESY OF NORTHEAST PAIN MANAGEMENT

Dr. Ben Zolper of Northeast Pain Management demonstrates a model of a human spine to a patient.

At Northeast Pain Management, Dr. Zolper works with patients to "find a method that controls or eliminates somebody's pain" without using prescribed pain medications over long periods of time.

PRP therapy is safe and easy, and takes about 20 minutes. It's just a needle injection, so it leaves no scars and greatly reduces the chance of infection.

The platelets release proteins called *growth factors*, which kick the body's natural healing into overdrive, stimulating the three necessary phases of healing: inflammation (initiates the tissue's healing process), proliferation (cell growth), and remodeling (such as absorbing old, and adding new, tissue).

This spurs intensive repair of tendons, ligaments, muscles, and other soft tissues. Recipients enjoy faster healing, faster pain reduction, less rehabilitation time, and avoiding surgery. Compared to surgery, it's extremely inexpensive, and perhaps more effective in some cases. And, on

average, patients receive just two or three injections at four-week intervals.

HOW IT'S DONE

Platelets are extracted from blood in a high-speed centrifuge. Using ultrasound to guide the needle, the doctor injects the platelets into the affected area, stimulating healing and tissue regrowth. Platelets are normally found in blood, but often very few of them reach damaged areas; now, three to 10 times the normal blood-platelet count is injected directly into the area. It's especially successful in areas that don't see much blood flow, such as tendons or ligaments.

This is a low-risk treatment with high-yield results, speeding healing by regenerating tissue, thus relieving pain and correct-

ing dysfunction. But treatment does require skilled, ultrasound-guided injection. Thanks to technological advances that have resulted in affordable, office-based ultrasound equipment, diagnosis and treatment of musculoskeletal injuries is now easy. Ultrasound can be used to diagnosis such things as carpal tunnel syndrome, torn rotator cuffs, tennis elbow, nerve entrapments, and causes of shoulder pain.

"The ultrasound here is going to broaden our treatment abilities to some of these areas of soft tissue," Zolper said. His ultrasound unit is compact, mounted on a rolling cart with its custom laptop for easy transport.

PRP'S TRACK RECORD

PRP therapy is not new, having been around since the 1990s,

but only recently has it found the spotlight. The Pittsburgh Steelers' Hines Ward and Troy Polamalu underwent PRP therapy before their Super Bowl win, and Los Angeles Dodgers pitcher Takashi Saito, who was suffering from elbow problems, had the treatment. The New York Times reports that about 20 pro soccer players, and maybe hundreds of recreational athletes, have all had PRP therapy.

PRP therapy could soon become a major treatment method for injuries that have traditionally been seen as conditions you just have to live with, such as tendinitis, tennis elbow, torn muscles, ligament injuries, and joint injuries. However, one challenge to PRP's mainstream acceptance is that many insurance companies don't yet cover it.

According to Zolper, there have been about 28 human studies. One recent study of 20 patients showed 60 percent improved after two months, compared to 16 percent in the control group. At the final follow-up (one to three years later), PRP-treated patients reported a 93 percent pain reduction.

Another study followed 14 patients with rotator-cuff tears. When conservative treatment had been ineffective, they were all recommended for surgery. However, following PRP treatment, only two ended up needing surgery.

Northeast Pain Management, operated by Dr. Zolper and his colleague, Dr. Peter Thompson, is the largest pain management office in northeast Maine, with referrals from as far away as Jackman and Madawaska. NPM is staffed by four experienced, specialized nurse practitioners who are assisted by two highly qualified physical therapists. For more information, visit NortheastPainManagement.com.