

Patient history

A painful lower back caused the male patient – 42 years old and self-employed as a carpet cleaner – to miss many days of work. With each passing week, the combination of unrelenting symptoms and anxiety over lost time on the job drove the man to progressively greater depths of misery and despair.

Case description

The patient was referred to us by his surgeon in April 2007 for conservative management of pain. Our workup revealed significant arthritic degeneration of the lumbar spine and a herniated disc. We determined these problems were due in large measure to the cumulative effects of aging, years of participation in strenuous sports and employment in a business where long hours of physical exertion are the norm.

At the time of initial presentation, the patient was taking low doses of short-acting acetaminophen/hydrocodone tablets. However, because the patient was developing tolerance of the medication, he had been steadily increasing his intake – not by adding more pills but by progressively shortening the time between each dosing (this a misguided attempt to side-step addiction).

We started the patient on a course of conservative management. But after a few weeks, he abruptly stopped coming to our office. He reappeared 10 months later,

bringing with him the surprise announcement that approximately 30 days earlier he had undergone lumbar fusion surgery and now was in greater pain than before.

Treatment plan

Initially, before he bolted, the patient's conservative management regimen consisted of blockade injections and modification of his medication. Upon his return to our office, we resumed that treatment strategy and continued with it for approximately 120 days. During that time, his body completed healing from the ineffective lumbar fusion surgery. By then, however, it was apparent to us that this patient required more than conservative management.

We prescribed radiofrequency denervation of the nerves in the lumbar medial branch. The first step in this intervention was to conduct a denervation trial to make sure the patient would be an appropriate candidate. Trialing entailed administering a blockade injection to the targeted nerves and then monitoring the effects over a period of eight to 16 hours. The patient was found to be a strong candidate for radiofrequency denervation because he reported a reduction in pain greater than 50%. The full and actual procedure was performed a short time later.

Outcome

Radiofrequency denervation greatly diminished the patient's chronic pain. Equally important, it provided a window of

opportunity for him to participate in physical therapy – by engaging in strengthening and conditioning activities (and by making important lifestyle changes, such as losing weight), the patient was able to improve the health of his back and thereby bolster his ability to keep pain from returning.

Radiofrequency denervation also enabled the patient to decrease and eventually discontinue (except for the infrequent need to address breakthrough pain) his use of hydrocodone pain medication.

Discussion

Radiofrequency denervation involves image-guided delivery of a needle to targeted nerves of the low back. After reaching the designated site, the tip of the needle is heated to temperatures of 80 degrees to 85 degrees Celsius and held in contact with the nerves for 90 seconds to 105 seconds. This resultant denervation disrupts transmission of pain signals from the low back to the brain, usually providing substantial pain relief up to 12 months and sometimes longer, until the treated nerves grow back.

Call 225-368-2300 today to schedule your preferred appointment time. We encourage, honor and welcome your referrals.

