A Systematic Approach

Defending Claims Involving Future Radiofrequency Neurotomy Treatments

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Plaintiffs often claim that they need this treatment indefinitely, creating the potential for significant future damage awards, but patients often discontinue the treatment after the third or fourth procedure.

Plaintiffs in personal injury actions often claim they will need future radiofrequency neurotomy (RFN) treatments indefinitely to obtain relief from chronic neck or back pain and to improve function and quality of life. These claims create the potential for significant future damage awards. Defense counsel often rely on their independent medical examination (IME) doctors to rebut these claims, but IME doctors may have a difficult time doing so because they often concede that RFN treatments only provide temporary relief from pain, and future treatments may be reasonable. Contrary to the claim that RFN treatments may be needed for the indefinite future, data from a plaintiff's own doctor often does not support such a claim. Instead, such data reveal that patients often discontinue that treatment after the third or fourth procedure. That data, which can and should be turned over during discovery, can discredit testimony by a plaintiff's pain specialist that RFN procedures may be needed in the future indefinitely. And the data could support a motion in limine to preclude such testimony altogether.

What Is a Radiofrequency Neurotomy?

A radiofrequency neurotomy is an injection most commonly given to individuals with facet joint pain, such as low back pain, neck pain, and thoracic and sacroiliac joint pain. Tyler J. Christensen et al., *Outcomes and Prognostic Variables of Radiofrequency Zygapophyseal Joint Neurotomy in Utah Workers' Compensation Patients*, 10 J.

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Pain Research 1207, 1208 (2017). The outpatient procedure involves the application of heat generated by radio waves to target specific peripheral nerves, cauterize them, and temporarily interrupt the nerve's ability to send pain signals. Radiofrequency Neurotomy, Mayo Clinic, https://www.mayoclinic.org; *See also Wheatley v. Cohen*, No. 14 C 5161, 2016 WL 183915, at *2, fn. 2 (N.D. Ill. Jan. 13, 2016).

An RFN cauterizes a peripheral nerve. A peripheral nerve, however, regenerates. As such, the pain someone experiences can return when the nerve regenerates. Eun Ji Choi, E et al., *Neural Ablation and Regeneration in Pain Practice*, 29 Korean J. Pain 3 (2016). For this reason, both plaintiff and defense medical experts may opine that the benefits experienced from an RFN wears off when the nerve regenerates, and future RFNs may be needed for the plaintiff to have ongoing relief from chronic pain.

The terms radiofrequency ablation and radiofrequency rhizotomy are used interchangeably with radiofrequency neurotomy. All three terms refer to the procedure used to treat facet joint pain or sacroiliac joint pain. *Radiofrequency Ablation*, Univ. of Cal. San Francisco Med. Ctr., https://www.ucsfhealth.org.

Typical Claims by Plaintiffs Regarding Future Treatments

Plaintiffs and their attorneys seek the assistance of doctors specializing in pain management to render opinions on the cause of a plaintiff's pain and the treatment needed to alleviate the pain arising from, or exacerbated by, the accident that is the subject of the litigation. When a plaintiff finds that conservative remedies do not provide the intended pain relief, the treating doctor may recommend a radiofrequency neurotomy.

When an RFN becomes part of a plaintiff's course of treatment, defense attorneys will usually receive an expert opinion formed by the plaintiff's treating doctor. The opinion will likely contain (1) the doctor's evaluation of the patient's pain and its cause; (2) a statement that the patient did not have significant pain relief with conservative therapy; (3) a summary of the patient's course of treatment under the doctor's care and the results; (4) a statement about the RFN that the patient received and its effect; and (5) an opinion that the RFN provided the intended pain relief, and it is necessary to repeat the RFN after the nerve regenerates for the remainder of the plaintiff's life.

As a baseline argument, plaintiffs' treating pain management doctors point to the generally accepted fact in the medical community that cauterized peripheral nerves regenerate after a period of time. Brian Rambaransingh et al., *The Effect of Repeated Zygapophysial Joint Radiofrequency Neurotomy on Pain, Disability, and Improvement Duration*, 11 Pain Med. 1343, 1343–1347 (2010). Pain management doctors therefore generally agree that an RFN is not a permanent solution and pain recurrence can happen when the treated nerves regenerate. *Id.* If the pain recurs, the patient can repeat the treatment to reinstate the relief.

Treating pain management doctors rely on clinical studies that have shown that repeating radiofrequency neurotomy treatments has been successful in 85 percent of patients who had a successful initial injection. *Id.* In these studies, success was defined by greater than or less than 50 percent pain relief and by the patient's desire to have the RFN repeated. *Id.* On average, successful RFN treatments relieved pain for eight to 13 months before the nerve regenerated. Jerome Schofferman et al., *Chronic Whiplash and Whiplash-Associated Disorders: An Evidence-Based Approach*, 15 J. Am. Academy of Orthopaedic Surgeons, 596, 596–606 (2007); Paul Dreyfuss et al., *Efficacy and Validity of Radiofrequency Neurotomy for Chronic Lumbar Zygapophysial Joint Pain*, 25 Spine 1270, 1270–1277 (2000); Greg McDonald et al., *Long-term Follow-Up of Patients Treated with Cervical Radiofrequency Neurotomy for Chronic Neck Pain*, 45 Neurosurgery 61, 61–68 (1999).

Typical Testimony from Plaintiffs' Treating Pain Management Doctors

Plaintiffs' pain management doctors consistently testify in favor of repeating RFNs. In a 2017 decision issued by the Texas Court of Appeals, the court reflected on the testimony offered by the plaintiff's treating doctor regarding future medical treatment using repeat RFNs. *Oney v. Crist*, 517 S.W.3d 882 (Tex. Ct. App. 2017), *review granted, judgment vacated, and remanded by agreement* (Apr 27, 2018). In *Oney*, the plaintiff's doctor testified to the following:

- Radiofrequency neurotomy can be classified as "an evidence based [sic] treatment because it is the 'standard of care around the world to use radiofrequency ablation to treat the lumbar posterior elements.'" *Id.* at 897.
- The medical community accepts that these treatments last six to 18 months before they need to be repeated. *Id.*
- "[T]he efficacy of repeat radiofrequency ablation has been studied, and it's about 85 percent. So almost nine out of ten people that get [a] good result from it the first time, will continue to get a good result if the procedure is repeated." *Id.*
- "[I]t's the standard of care around the United States to repeat radiofrequency neurotomy at whatever interval is necessary to keep the patient pain-free." *Id.*
- Patients have been successfully treated for 15 or more years and have benefited from repeating the treatment. *Id.* at 898.
- "[R]epeating the neurotomy every 18 months for someone who has responded to a previous neurotomy is a conservative projection." *Id.*

In a personal injury case filed in the U.S. District Court for the Middle District of Louisiana, the plaintiff's economist opined that it would cost more than $350,000 for the plaintiff to have the procedure repeated for the remainder of his life, even though the plaintiff's pain management doctor never testified that the plaintiff *would* experience relief for the rest of his life by repeating them. *Berry v. Auto-Owners Ins. Co.*, No. 15-30483, 2015 WL 4592129, at 8–9 (5th Cir. July 27, 2015) (Brief of Appellants). The plaintiff's doctor could only testify in terms of possibilities when asked under oath to identify how long the RFNs would continue:

Q. Do you believe that the future medical treatment is going to include both the radiofrequency ablations and pain medication?
A. I do.
Q. And how long do you believe that you will keep repeating these radiofrequency ablations?
A. Again, I will keep doing these as long as the patient gets relief. We discussed the literature. We discuss

[sic] my clinical practice. Literature goes out to seven years. My clinical practice goes out to ten years. But if it helps this gentleman for 20 years, I'll continue to do it for 20 years.

Q. And if it works, longer?

A. Thirty (30) years.

Id. at *9.

In another case involving a plaintiff who claimed back, neck, and knee pain as a result of two motor vehicle accidents, the plaintiff's treating doctor offered testimony during her trial deposition about the efficacy of RFNs. The doctor was a board-certified physical medicine and rehab physician specializing in spine care. She first described the RFN treatment as a semi-permanent block for the patient's pain and explained that the trauma is still present but that the treatment blocks the patient's ability to sense the pain. In this particular case, the plaintiff received four radiofrequency neurotomy treatments, but they each only provided four months of complete pain relief. While the doctor acknowledged in her deposition that the clinical studies demonstrate an average of 13 months of pain relief, the doctor testified that it was her professional medical opinion that this particular patient was still a candidate for repeating the RFNs because "they gave him greater relief than anything else that's been done for him." The plaintiff's doctor continued to testify that "the majority of people require an RFN be repeated because the treated nerve grows back and repeated cauterizations are needed to obtain the treatment benefit." The doctor testified that each RFN at her clinic cost $2,500.

Typical Testimony from a Defense IME Doctor

Defense counsel may want to rely on their independent medical examination doctor for the opinion that radiofrequency neurotomy provides a long-lasting solution and that repeat RFNs are unnecessary. The problem, however, is that plaintiffs' doctors and IME doctors generally agree that it does not provide a permanent cure for facet injury. For example, at one trial, a medical expert for the defense testified as follows:

Q. Would you agree with me that RFNs are not a permanent cure for facet join pain?

A. Yes.

Q. Would agree with me that over time the nerve can regrow and the pain can return?

A. Yes.

Important Evidence that the Defense Should Obtain During Discovery

Plaintiffs' counsel and treating pain management doctors are not focusing on the studies that show that the numbers of patients who undergo repeat RFNs get significantly smaller as the repeated RFN number increases. Instead, they claim by default that a plaintiff must be compensated for the costs and expense associated with RFN treatments for the duration of the plaintiff's life because this is the only procedure that relieves the plaintiff from his or her chronic pain. There is very important evidence that a defense attorney should obtain to defeat a plaintiff's claim for significant future damages, which demonstrate that patients rarely continue to receive the treatment.

Clinical Study

In 2008, doctors Daniel Husted, Derek Orton, Jerome Schofferman, and Garrett Kine studied the success rate of repeating radiofrequency neurotomy treatment for cervical facet join pain. Daniel Husted et al., *Effectiveness of Repeated Radiofrequency Neurotomy for Cervical Facet Joint Pain*, 21 J. Spinal Disord. Tech. 406, 406–408 (2008). They relied on patient satisfaction to measure "success," which was demonstrated by the patient's desire to have the RFN repeated, and patients reporting greater than 50 percent subjective pain relief, as recorded clinically post-procedure, compared with the pre-procedure condition. In their study of 21 patients between the ages of 34 and 66 years, they observed that after the initial, successful RFN, repeating them was successful for 95 percent of the patients. However, the number of RFNs repeated *significantly decreased* after the second treatment. Table 1 summarizes their findings. Of the 22 patients, all but one had a second radiofrequency neurotomy. After the second, only 50 percent—11 patients—returned for a third. Of the 11 patients who returned for a third, only four returned for a fourth, and only two patients returned for a fifth.

Defense counsel should be prepared to request critical statistical evidence during the discovery period to overcome, or at least minimize, a plaintiff's claim for indefinite, future RFNs.

Subpoenas

Subpoenas to pain specialists and their clinics requesting data on the number of radiofrequency neurotomy treatments performed on patients by doctors affiliated with the clinics is a great way to gather this data. Consider including the following topics with your subpoena to a pain management clinic:

1. The total number of patients on whom a radiofrequency neurotomy was performed by doctors affiliated with the clinic in the last 10 years, including, but not limited to, procedures that are included under current procedural terminology (CPT) codes 64633, 64626, 64634, 64627, 64635, 64622, 64636, and 64623.
2. The total number of patients on whom, in the last 10 years, doctors affiliated with the clinic performed a *second*, *third*, *fourth*, *fifth*, *sixth*, *seventh*, *eighth*, *ninth*, and *tenth* radiofrequency neurotomy at the same cervical or thoracic

Table 1

No. RFN	1	2	3	4	5	6	7
No. patients	22	21*	11	4	2	2	1
No. successes	22	20	10	4	2	2	1
No. successes in whom duration of relief is known	22	18	8	4	2	1	0
Duration (mo.)	12.5	12.7	9.5	8.8	9	18	N/A
No. successes in whom relief is ongoing	0	2	2	0	0	1	1
Duration (mo.)		>7	>7			>4	>8

*One patient did not continue in the study.

level or location as the prior treatment, including, but not limited to, procedures that are included under CPT codes 64633, 64626, 64634, 64627, 64635, 64622, 64636, and 64623.

3. The average time between radiofrequency neurotomy treatments for patients who receive three or more such treatments at the same cervical or thoracic level or location.
4. The negotiated rates between the clinic and the health insurer, Medicare, or other third-party payer for the following treatments:
   a) RF Cerv/Thor Joint1st, CPT code 64633
   b) RF Cerv/Thor Joint 1st, CPT code 64626
   c) RF Cerv/Thor Joint EA A, CPT code 64634
   d) RF Cerv/Thor Joint EA A, CPT code 64627
   e) RF Lumbar Joint 1st, CPT code 64635
   f) RF Lumbar Joint 1st, CPT code 64622
   g) RF Lumbar Joint EA A, CPT code 64636
   h) RF Lumbar Joint EA A, CPT code 64623
   i) Mod Sedation First 30 M, CPT code 99144
   j) Mod Sedation EA Add'l 1, CPT code 99145

(On January 1, 2012, CPT codes 64633, 64634, 64635, and 64636 replaced CPT codes 64622, 64623, 64626, and 64627. The CPT codes 64622–64627 may still be relevant for discovery purposes.)

By referencing specific current procedural terminology codes, a subpoena forces the pain specialists and their offices to produce the relevant data, and it prevents them from objecting to the subpoena on the grounds that the request is too onerous.

A subpoena should also state that the terms "radiofrequency neurotomy," "radiofrequency ablation," and "radiofrequency rhizotomy" refer to the same procedure, and that it is not requesting patient names, Social Security numbers, or other information that could be used to identify an individual patient.

The data generated in response to these subpoenas can reveal that the plaintiffs' arguments for continuing to have radiofrequency neurotomy treatments indefinitely are not as persuasive. For example, the authors of this article served subpoenas on two pain management clinics requesting the data discussed above. In that case, the plaintiff's pain specialist opined that the plaintiff would need to repeat RFN treatments once a year for the rest of the plaintiff's life. Specifically, that doctor stated in his narrative report the following:

> [Plainitff's] chronic neck pain has been present for over four years and has not resolved with time or conservative therapy. Therefore, to a reasonable degree of medical certainty his neck pain will not spontaneously resolve. That neck pain is, in fact, permanent and will require repeat radiofrequency ablation procedures on approximately an annual basis for the remainder of his life if he wishes to have relief for that chronic pain.

In response to a subpoena, the clinic where the plaintiff's pain specialist practiced, referred to here as XYZ Anesthesiology, produced a summary of the RFN treatments that the clinic performed between 2006 and 2015. The summary showed that 89 individuals had an RFN at one cervical or thoracic level. Of those, 23 patients had a second, four had a third, and none had more than six total. The average number of days between the treatments for patients who received three or more was 199 days. *See* Table 2.

Table 2.

Another clinic, referred to here as ABC Anesthesiology, where the plaintiff received treatment initially, produced records consistent with XYZ Anesthesiology. ABC Anesthesiology's response showed that 93

Table 2

XYZ Anesthesiology

Level of RF *Not* Taken into Consideration

	1st Time	2nd Time	3rd Time	4th Time	5th Time	6th Time	7th Time	8th Time	9th Time	10th Time	11th Time	12th Time	13th Time	14th Time	Average # of Days Between RF's if 3 or More Performed
Cervical/ Thoracic 1st Level (64626 or 64633)	89	23	4	3	2	2	0	0	0	0	0	0	0	0	199
Cervical/ Thoracic Subseq Level (64627 or 64634)	72	17	4	2	1	0	0	0	0	0	0	0	0	0	261
Lumbar 1st Level (64622 or 64635)	412	126	44	19	8	6	3	1	1	1	1	1	1	1	408
Lumbar Subseq Level (64623 or 64636)	336	108	37	18	6	5	2	1	1	1	1	1	1	0	392

2016 Medicare Allowable

64633 – $222.11	64634 – $67.65	99144 – $40.90
64633 – $331.17	64634 – $101.48	99145 – $10.59

individuals had an RFN at one cervical or thoracic level between 2006 and 2015. Of those, 12 returned for a second, three for a third, and one person had a sixth. No patients had more than six treatments. The average number of days between RFNs for patients who received three or more was 286 days. *See* Table 3.

In short, over a 10-year period, neither clinic had any patients who received more than six cervical or thoracic radiofrequency neurotomies. Only 2.2 percent of ABC Anesthesiology's patients received five or six treatments, and only one person, 1.1 percent of XYZ Anesthesiology's patients, received more than three cervical or thoracic treatments.

These statistics are consistent with testimony recounted by the court in a case commenced in the U.S. District Court for the Eastern District of Louisiana, during which a plaintiff's doctor "testified that typically after five rhizotomies, the procedures lose their efficacy in terms of treating a patient's pain." *Coston v. Windfall Inc.*, Civil Action Case No. 15-1809, 2016 WL 1660199, at *3 (E.D. La. April 27, 2016). It is also consistent with the 2008 study discussed previously, *Effectiveness of Repeated Radiofrequency Neurotomy for Cervical Facet Join Pain*.

Motions in Limine to Exclude Testimony About Future Treatments

Defendants facing claims of future damages for radiofrequency neurotomy treatments should move to exclude the testimony of a plaintiff's doctor on the grounds that it does not meet the standard of admissibility. *See, e.g.,* Fed. R. Civ. P. 702.

While a defense attorney may agree that an expert's testimony about future medical treatment is helpful and that the plaintiff's expert is qualified, the attorney should be prepared to advise the court that the information that the defendant received in discovery demonstrates that the doctor's testimony about the need for future RFN treatments is neither reliable nor trustworthy. In cases involving claims for future medical expenses, a plaintiff must establish that future medical treatments are required and the amount of the damages. This nearly always requires expert testimony. E. LeFevre, *Requisite Proof to Permit Recovery for Future Medical Expenses as Item of Damages in Personal Injury Action*, 69 A.L.R.2d 1261 (originally published in 1960).

In cases pending in the federal courts, the proponent of an expert witness must prove that the expert's testimony is admissible by a preponderance of the evidence. *Lauzon v. Senco Prods., Inc.,* 270 F.3d 681, 686 (8th Cir. 2001) (citing *Daubert v. Merrell Dow Pharm., Inc.,* 509 U.S. 579, 592 (1993)). The trial court must determine whether the expert's testimony "both rests on a reliable foundation and is relevant to the task at hand" and whether the expert is qualified. *Daubert*, 509 U.S. at 597. Accordingly, plaintiffs in these cases must prove by a preponderance of the evidence that the testimony of his or her pain management doctor is reliable. *Eaton Corp. v. Parker-Hannifin Corp.*, 292 F.Supp.2d 555, 567 (D. Del. 2003).

In *Daubert*, the U.S. Supreme Court emphasized the district court's gatekeeper role when screening expert testimony for rele-

Table 3

ABC Anesthesiology

Code Number and Description	1st Time	2nd Time	3rd Time	4th Time	5th Time	6th Time	7th Time	8th Time	9th Time	10th Time	*
Code 64633 (cervical/thoracic 1st joint) (9/2013 – 12/2015) Code 64626 (cervical/thoracic 1st joint) (2006 – 9/2013)	93	12	3	1	1	1	0	0	0	0	286
Code 64634 (cervical/thoracic each add'l) (9/2013 – 12/2015) Code 64627 (cervical/thoracic each add'l) (2006 – 9/2013)	93	11	3	1	1	1	0	0	0	0	259
Code 64635 (lumbar/sacral 1st joint) (9/2013 – 12/2015) Code 64622 (lumbar/sacral 1st joint) (2006 – 9/2013)	571	80	20	0	1	0	0	0	0	0	299
Code 64636 (lumbar/sacral each add'l joint) (9/2013 – 12/2015) Code 64623 (lumbar/sacral each add'l joint) (2006 – 9/2013)	559	82	21	2	2	1	0	0	0	0	329

FOOTNOTES *The overall average time in days between radiofrequency neurotomy treatments for patients who received three or more treatments.

KEY
- CPT code 64622/64633 includes "Destruction by neurolytic agent, paravertebral facet joint nerve(s); cervical or thoracic, single facet joint."
- CPT code 64623/64634 includes "Destruction by neurolytic agent, paravertebral facet joint nerve(s); cervical or thoracic, each additional facet joint."
- CPT code 64626/64635 includes "Destruction by neurolytic agent, paravertebral facet joint nerve(s); lumbar or sacral, single facet joint."
- CPT code 64627/64636 includes "Destruction by neurolytic agent, paravertebral facet joint nerve(s); lumbar or sacral, each additional facet joint."

vance and reliability. *Lauzon v. Senco Products, Inc.*, 270 F.3d 681, 687 (8th Cir. 2001). The district court should look at "(1) whether the theory or technique 'can be (and has been) tested'; (2) 'whether the theory or technique has been subjected to peer review and publication'; (3) 'the known or potential rate of error'; and (4) whether the theory has been generally accepted." *Id.* (quoting *Peitzmeier v. Hennessy Indus., Inc.,* 97 F.3d 293, 297 (8th Cir.1996) (citing *Daubert,* 509 U.S. at 593–94)). And "[s]peculative testimony should not be admitted." *Junk v. Terminix Intern. Co.*, 628 F.3d 439, 448 (8th Cir. 2010).

In cases involving claims for future radiofrequency neurotomy treatments, the defense can persuasively argue that while a doctor's report indicates that the plaintiff will need annual treatments for the rest of his or her life, that opinion is not supported by any medical literature that shows that patients receive treatments for that period of time and it is inconsistent with the statistics from the doctor's own clinic. The expert's claims are therefore speculative and counter to the available evidence, and the court should prohibit the doctor from testifying that the plaintiff will need future, indefinite RFN treatments.

Conclusion

Defense attorneys should follow a systematic approach to defend against plaintiffs' claims for indefinite, future radiofrequency neurotomy treatments. It is important for defense attorneys to recognize at the outset of their cases that their IME doctors will probably agree that radiofrequency neurotomy treatment may only provide temporary relief from pain caused by a facet injury and that it may be reasonable to repeat it when the pain returns. The IME doctors may also concede that clinical studies have shown that patients who have undergone a successful radiofrequency neurotomy will likely experience the same success on repeating them. Therefore, to dispute plaintiffs' claims for unlimited, future radiofrequency neurotomy treatments, it is critical for defense counsel to subpoena data from the plaintiff's pain specialist to show that almost all of his or her own patients cease getting them after three or four procedures. Such data may very well preclude the plaintiff's pain specialist from testifying that the plaintiff will need future RFNs. FD