

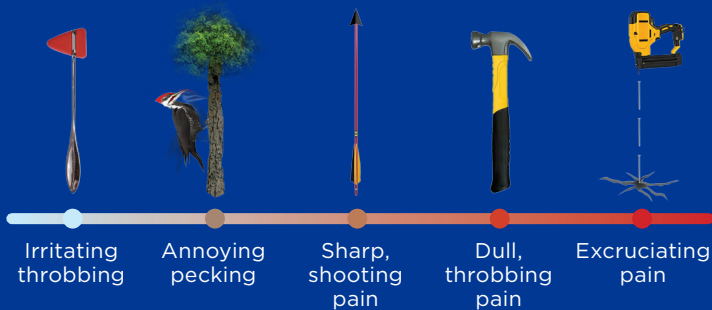


# HAVE YOU HEARD ABOUT COOLIEF\* COOLED RADIOFREQUENCY TREATMENT?

**COOLIEF\***  
Cooled Radiofrequency Treatment

## USE THIS GUIDE WHEN TALKING WITH YOUR PRIMARY CARE DOCTOR ABOUT THE BENEFITS OF COOLIEF\*

Chronic pain affects 100 million Americans—more people than diabetes, heart disease, and cancer combined. It is the #1 cause of adult disability every year, and can lead to an increase in opioid use and loss of productivity. Of those 100 million, 30 million have osteoarthritis (OA)—the most common form of arthritis. It is sometimes called degenerative joint disease or “wear and tear” arthritis. It most frequently occurs in the hands, hips, and knees.<sup>1</sup>



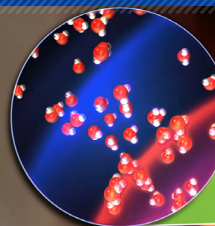
## CHRONIC OA KNEE PAIN CAN RANGE FROM MILD TO SEVERE

Whether you’ve been living with OA knee pain for months or years, your treatment options may change. You may have started with conservative therapies (such as physical therapy or NSAIDs), but only found temporary relief. When your pain is severe enough that your physician begins talking about more serious treatments such as opioids or steroid injections as your next option, it might be time to consider COOLIEF\* Cooled RF, a minimally invasive, non-opioid treatment that provides up to a year of pain relief.

## COOLIEF\* IS A MINIMALLY INVASIVE TREATMENT OPTION TARGETING NERVES THAT TRANSMIT PAIN

When treating patients with OA knee pain, many patients must delay or don’t qualify for total knee replacement surgery. But as pain worsens, current pain treatment options, such as steroid injections and opioids, may only offer short-term relief or carry too much risk.

COOLIEF\* is the first and only radiofrequency treatment FDA cleared to relieve moderate to severe OA knee pain. It’s a minimally invasive, non-opioid procedure that provides up to 1 year of pain relief. While not a replacement for knee surgery, a recent multicenter clinical study conducted with 151 OA knee patients demonstrated that COOLIEF\* provides significantly greater and longer-lasting pain relief, improved physical function, and higher patient satisfaction than intra-articular steroid injections.<sup>2-6</sup>



### IONIC HEATING ACTION

CAUSES SURROUNDING H<sub>2</sub>O MOLECULES TO MOVE, CREATING FRICTION AND HEAT.

## HOW RADIOFREQUENCY WORKS

1

This RF energy creates a treatment area that safely deactivates the nerves carrying pain signals, while leaving motor nerves intact to preserve function.<sup>7-9</sup>

2

The COOLIEF\* radiofrequency generator transmits a small current of thermal energy through a water-cooled electrode placed within the knee’s tissue to safely and effectively deactivate difficult-to-reach sensory nerves, relieving knee pain for up to a year.

# THE TOP 7 WAYS COOLIEF\* CAN RELIEVE OA KNEE PAIN



## 1. Dramatic pain reduction

There was a 93% reduction of patients reporting severe OA symptoms 6 months after receiving COOLIEF\*.<sup>10</sup>



## 2. Pain relief for up to 12 months

In clinical studies, most patients receiving COOLIEF\* reported that their pain was significantly reduced for up to 1 year.<sup>10</sup>



## 3. Improved mobility

COOLIEF\* has been proven to significantly improve long-term physical function and quality of life.



## 4. Quick recovery time

Because the procedure is minimally invasive, most patients can expect to feel pain relief within 1-2 weeks, much sooner than with surgery.



## 5. No opioid recovery medication

There may be some discomfort for a short period, but this discomfort can typically be treated with common over-the-counter medication.



## 6. No overnight hospital stay

Since this outpatient treatment requires no general anesthesia, patients are able to return home shortly after treatment.



## 7. No incision

Unlike surgery, COOLIEF\* involves no incision.

## ADDITIONAL COOLIEF\* INFORMATION YOU OR YOUR PHYSICIAN MAY BE INTERESTED IN

Visit us on the Web at [YourOApatient.com](http://YourOApatient.com) ▶

### Read the [clinical study that shows how COOLIEF\\* significantly reduced and sustained pain relief compared to intra-articular steroid injection steroids](#) ▶

Davis T, et al. Prospective, multicenter, randomized, crossover clinical trial comparing the safety and effectiveness of cooled radiofrequency ablation with corticosteroid injection in the management of knee pain from osteoarthritis. *Reg Anesth Pain Med.* 2018;43:1-8.

For more information on COOLIEF\*-trained specialists or accepted insurance plans, visit [myCOOLIEF.com](http://myCOOLIEF.com) ▶

See our ads for healthcare professionals in current medical publications



**REFERENCES:** 1. Centers for Disease Control and Prevention, Osteoarthritic fact sheet. <https://www.cdc.gov/arthritis/basics/osteoarthritis.htm>. Accessed May 3, 2017. 2. Malik A, et al. Percutaneous radiofrequency lesioning of sensory branches of the obturator and femoral nerves for the treatment of non-operable hip pain. *Pain Physician.* 2003;6:499-502. 3. Kawaguchi M, et al. Percutaneous radiofrequency lesioning of sensory branches of the obturator and femoral nerves for the treatment of hip joint pain. *Reg Anesth Pain Med.* 2001;26:576-581. 4. Stelzer W. Use of radiofrequency lateral branch neurotomy for the treatment of sacroiliac joint-mediated low back pain: a large case series. *Pain Med.* 2013;1:235. 5. Rivera F, et al. Percutaneous radiofrequency denervation in patients with contraindications for total hip arthroplasty. *Orthopedics.* 2012;35:e302-e305. 6. Halyard Health Inc. Sponsored study. A prospective, multi-center, randomized, clinical trial evaluating the safety and effectiveness of using COOLIEF Cooled Radiofrequency probe to create lesions of the genicular nerves and comparing corticosteroid steroid in the management of knee pain. Final results 03April2017. Study available upon request from Halyard. 7. Pauza K. Cadaveric intervertebral disc temperature mapping during disc biacuplasty. *Pain Physician.* 2008;11:669-676. 8. Kapural L, et al. Histological changes and temperature distribution studies of a novel bipolar radiofrequency heating system in degenerated and non-degenerated human cadaver lumbar discs. *Pain Med.* 2008;9:68-75. 9. Petersohn JD, et al. Acute histologic effects and thermal distribution profile of disc biacuplasty using a novel water-cooled bipolar electrode system in an in vivo porcine model. *Pain Med.* 2008;9:26-32. 10. Choi WJ, et al. Radiofrequency treatment relieves chronic knee osteoarthritis pain: a double-blind randomized controlled trial. *Pain.* 2011;152:481-487.

There are inherent risks in all medical procedures, including COOLIEF\* Cooled RF. Not all patients are candidates for COOLIEF\* Cooled RF and individual results may vary. Side effects may include, but are not limited to, pain and numbness at or around the procedure site, infection, nerve damage, and gastrointestinal or respiratory complications.

Talk to your physician to thoroughly understand the benefits and risks of the procedure. Additional information on COOLIEF\*, including cautions, warnings, and contraindications, can be found at <https://mycoolief.com>.

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