Radiofrequency nerve ablation for treatment of plantar fasciitis

HAYES, Inc

Record Status
This is a bibliographic record of a published health technology assessment. No evaluation of the quality of this assessment has been made for the HTA database.

Citation

Authors' conclusions
Health Problem: Plantar fasciitis (PF) is inflammation of the plantar fascia, the thick connective tissue that lies between the heel bone and the base of the toes. Repetitive microtrauma leads to degeneration and inflammation of the plantar fascia, which causes chronic heel pain. PF is the most common cause of heel pain and the reason for more than 1 million patient visits per year in the United States. PF is primarily treated nonoperatively, and up to 95% of patients have symptom resolution within 12 to 18 months. Technology Description: Radiofrequency nerve ablation (RFNA) is a minimally invasive procedure that has been employed to relieve chronic pain, including that associated with PF. Application of radiofrequency energy causes thermal damage to the nerve, which reduces or eliminates the perception of pain. After intradermal injection of a local anesthetic, a radiofrequency cannula is inserted into the heel. Sensory stimulation is performed to identify the location of the target nerve, typically the medial or inferior calcaneal nerves. At this point, lidocaine, or other anesthetic, is applied to the target nerve to relieve pain during RFNA. Next, the radiofrequency probe is advanced through the cannula and the temperature of the tip is increased to 90°C for 90 seconds. The procedure can be performed in 10 minutes or less, and the patient may resume normal activities as tolerated. Controversy: Patients suffering from recalcitrant PF have very few safe and effective treatment options available to them. Surgical fasciotomy is associated with surgical morbidity and a lengthy recovery period and may lead to collapse of the arch or other foot problems. Repeated corticosteroid injections may lead to permanent soft tissue atrophy. RFNA represents a safe and minimally invasive alternative. Key Questions: Is RFNA effective at reducing pain associated with plantar fasciitis? How does RFNA compare with alternative treatments for plantar fasciitis? Is RFNA safe for treatment of plantar fasciitis? Have definitive patient selection criteria been identified for use of RFNA to treat plantar fasciitis?

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