Dynamic Chiropractic

Review of the Management of Plantar Fasciitis (clinical antecedent to calcaneal spur)

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Cailliet has reviewed the pain related to a history which has an etiology leading to a calcaneal spur in his writings. Such pain is related to an irritative clinicopathology present at the point of coalescence of the plantar fascia and the calcaneal periosteum. This pain is due to the presence of inflammatory edema involved in this inflammatory process. The historical byproduct of chronic plantar fasciitis is the formation of a calcaneal spur. With the formation of this spur, the inflammatory process and the pain which accompanies it abates as a rule.

Since the pain in this clinical process is related to inflammation, it is appropriate to treat it by eradication of the inflammatory process. Physical agents which may be employed may include, but not limited to, pulsed medical ultrasonation, or lidocaine/cortisone phonophoresis. Either method requires that the center of the sonation beam be directed as near to the center of the inflamed region of the fascioperiosteal junction as possible. This may be determined by isolating this site by palpation, applying the phonophoretic agents to be transferred directly at this juncture, and administering the ultrasound at 0.5 w/cm2 for 5-8 minutes, p.r.n. pain.

If ultrasound is used alone, it may be best applied under water to the site being treated in the same manner of application. The phonophoretic agents should be transferred using a menstruum which complements their solubility, i.e., oil with oil. Continuous ultrasound is not recommended because the thermal delivery which results would probably complement the inflammation, i.e., heat is one of the cardinal components of inflammation.

There are stretch exercises often recommended as a form of treatment in physical therapy, but this author mentions them only in passing as they have not been found to offer benefit.

If the patient is corpulent, weight reduction should be recommended. Management could include elevating the heel of the shoe about 3/4 to 1 inch, or sufficiently to relieve tension of the plantar fascia. Women wearing flats may wear slight heels to achieve this temporarily.

It is common for a spur to continue to form, but it is also common for the pain to abate with the resolution of the inflammation. It has been this author's experience over many years that with no treatment other than oral anti-inflammatory agents, a spur forms and the pain disappears after about 8 months to a year; also, that it is very rare to justify surgical reduction of this lesion.

References

1. Griffin & Karselis. Physical Agents for Physical Therapists. 2nd edition 1982, Thomas Publishers.
2. Schriber. A Manual of Electrotherapy. 4th edition 1975, Lea & Febiger Publishers.
3. Cailliet. Soft Tissue Pain & Disability. F.A. Davis Publishers.
4. Davis. Therapeutic Modalities for the Clinical Health Sciences. 2nd edition 1989.

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