Gastrocnemius Recession for Treatment of Chronic Plantar Fasciitis
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(a – Zimmer
b – Arthrex, Zimmer
d – Merck, Pfizer
e – Zimmer)

Plantar fasciitis remains one of the most frequently seen conditions for the practicing foot and ankle surgeon. Commonly accepted treatments include supportive orthoses, plantar fascial and gastrocsoleus stretching, night splinting, anti-inflammatory medication, activity reduction, weight loss, injection therapy, extracorporeal shock wave therapy, and plantar fascia release. Gastrocnemius recession has recently gained attention as a viable treatment alternative in refractory cases.

For years prior to 2003, it had been our general impression that a large number of patients who required treatment for various stages of arch collapse had previously been treated for heel pain over the course of their lifetime, treatment often occurring many years earlier. Our experience with gastrocnemius recession for treatment of chronic plantar fasciitis dates back to 2003, when this became our preferred treatment of choice for this condition. Our rationale for this treatment is predicated on a comprehensive evaluation of the pathomechanics and frequently seen patterns of arch collapse (see appendix 1 for more comprehensive explanation). In this classification scheme, plantar fasciitis is looked at as a pre-collapse state, or one of the earliest presenting symptoms of an arch under stress. Gastrocnemius contracture, amongst other factors (body weight, activity demands) is felt to play a major etiological role in the development of arch overload and subsequent strain on the plantar fascia and other supporting structures. Release of the gastrocnemius addresses the primary pathology.

Since 2003, over 160 isolated gastrocnemius recessions have been performed by a single surgeon, for symptoms ranging from plantar fasciitis, achilles tendonitis or tendonosis, arch pain, and metatarsalgia. The majority of cases involve a diagnosis of plantar fasciitis. All cases were referred because they were refractory to conventional conservative treatment. A comprehensive review of our first 34 cases demonstrated 94% patient satisfaction (AOFAS summer meeting, Toronto, 2007), and our experience since then has been consistent. No patient to date has required subsequent treatment for heel pain following their gastrocnemius recession, nor have any required any arch collapse related reconstructions.

Treating chronic plantar fasciitis as a type 1 “precollapse” by gastrocnemius recession alone is safe, effective, lacks the problems associated with plantar fascia release (accelerated collapse), and may protect the arch from further deterioration and progression down the collapse cascade.