Endoscopic Calcaneoplasty: Middle Term Results

Foot & Ankle Category: Sports

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Introduction
Haglund’s disease is one of the most common causes of posterior heel pain caused by mechanical induced inflammation of the retrocalcaneal or supracalcaneal bursa and superolateral calcaneal prominence. Two different surgical techniques for Haglund’s disease have since been described: the open approach and endoscopic approach. We conducted a retrospective study to evaluate the safety and functional outcomes of this endoscopic technique for retrocalcaneal bursitis and Haglung’s disease.

Methods
Between 2003 and 2009, 25 feet of 23 patients were operated by the same surgeon because of Haglund’s disease which were resistant to conservative therapy. The average age was 37 years (range, 19 to 64). There were 15 men and 8 women. All patients had undergone endoscopic calcaneoplasty and retrocalcaneal bursectomy. Bilaterally operated patients were both men and also had sero-negative arthropathies. Under general anesthesia patient is positioned prone or supine (23 feet prone, 2 feet supine) to allow his foot and ankle hang over the edge of the table. The lateral portal is created first, just above the superior aspect of the calcaneus lateral to the Achilles tendon. With the direct visualization of the medial side, first a spinal needle is introduced to the superior aspect of the calcaneus then the medial portal is created. A resector is introduced from the medial portal to remove the inflamed bursa and superior surface of calcaneus. Then the foot is placed in plantarflexion and with the help of a burr adequate bone is removed from the calcaneus. If required, fluoroscopic evaluation can be used to evaluate the amount of bone removed. All patients are discharged at the same day and are allowed to perform range of motion exercises at the first postoperative day and allowed full weight bearing at the second postoperative week.

Results
Patients were re-examined after an average follow-up period of 51.4 months (between 24 and 75 months). 23 patients (25 heels) had an average AOFAS score of 52.6 points (between 24 and 75) preoperatively and 98.6 points (between 90 and 100) at the final evaluation (p<0.005). All patients were satisfied with the result of the operation and stated that under similar circumstances they would undergo the surgery again. All patients were also pleased with the small incisions inherent to the endoscopic surgery. There were neither intraoperative complications nor postoperative complications.
Conclusion
Haglund’s syndrome can be a challenging situation for an orthopaedic surgeon because of high chance of failure with conservative treatment and high complication rates with open operative techniques. Arthroscopic procedures become more popular because of the advantages like reduced morbidity and infection, early functional improvement and skin healing, reduced postoperative pain and outpatient procedure. Direct visualization of the Achilles tendon, removal of the symptomatic retrocalcaneal bursa, removal of calcaneal spur and more importantly improved functional rehabilitation proves that retrocalcaneal endoscopy can be the procedure of choice in the treatment of Haglund’s syndrome.