

Contact Info: [Footmaxx.com](http://Footmaxx.com) • 1.800.779.3668

## **Footmaxx™ in Basketball News**

### **Plantar Fasciitis**

Plantar fasciitis is a condition wherein the plantar fascia is pulling on the periosteum at the calcaneus therefore causing inflammation and pain. The plantar fascia is connective tissue that acts as a stabilizer and maintains the integrity of the arch of the foot. The most common complaint among patients is of severe pain in the heel at the hindfoot (plantar surface of the calcaneus), particularly when they take their first few steps of the day, or after they have been off their feet for a prolonged period of time.

Among athletes and middle-aged adults, plantar fasciitis is especially common. The plantar fascia is repeatedly over-torqued because the calcaneus in the hindfoot is stable while the forefoot is over-pronating. This shearing force causes the plantar fascia to become inflamed.

Because the weakest part of the plantar fascia is the attachment to the periosteum (fibrous membrane covering the bone) at the calcaneus, pain on the medial side of the calcaneus is felt.

Treatment options vary according to symptoms. If the pain is caused by over-pronation and continuous torquing of the fascia, an aggressive, more rigid orthotic is needed to arrest the torquing and stabilize the forefoot. If the pain is found in the middle area of the plantar fascia, aggressive rearfoot control is needed and can be found with orthotics.

Since the problem is the over-pronation, orthotics that control pronation and arch elongation should be prescribed. The patient can expect a 20-25 percent improvement every two weeks until complete recovery, which generally takes two to three months.



### **How Footmaxx Can Help! Heelmaxx.**

We also offer Heelmaxx as an accommodation to the orthotics. The Heelmaxx is a circular cut-out of the orthotic module underneath the heel, filled in with a cushioning material (Polyurethane). It includes heel capping. The purpose of Heelmaxx is to pad and offload the central portion of the calcaneus and should be used for patients experiencing heel pain due to conditions such as plantar fasciitis, heel spurs or Sever's disease.

### **The Footmaxx Difference Includes:**

**Custom Fitting**  
Sportmaxx™ Pro-Basketball Flex orthotics are custom made to fit the shoes your patients wear, eliminating the need to send shoes away to a lab and decreasing wait time.

**Correction Plus Comfort**  
The orthotic provides the proper amount of biomechanical support and correction; we provide less bulk and more support!

**Quality Materials**  
Sportmaxx Pro-Basketball Flex orthotics are made with the athlete or active patient in mind. That means the materials are durable and the quality is specific to the nature of their use. Your patients deserve top quality biomechanical support.

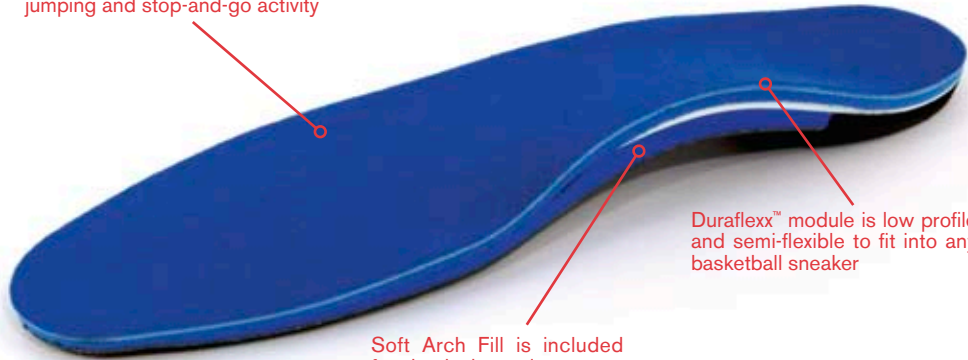
### **What's Inside:**

- ▶ Pro-Basketball Flex ..... p. 2
- ▶ Ask a Doctor ..... p. 2
- ▶ Case Study ..... p. 3
- ▶ Hammer Toes ..... p. 3
- ▶ Metascan Tip ..... p. 4

# Featured Products:

## Sportmaxx™ Pro-Basketball Flexx

Synthetic brushed suede top cover provides shock absorption for jumping and stop-and-go activity



Duraflex™ module is low profile and semi-flexible to fit into any basketball sneaker

Soft Arch Fill is included for shock absorption

*Sportmaxx Pro-Basketball Flexx*

### Design and Features

Extra shock absorption and friction reduction provide more comfort during play. The soft arch fill or strip increases rigidity for the perfect amount of biomechanical control.

### Important Biomechanics

The Pro-Basketball Flexx comes with a semi-flexible module for ultimate biomechanical control. The synthetic brushed suede top cover provides shock absorption while reducing friction, and allows moisture to pass through. The soft arch fill or strip increases rigidity and shock absorption while extending the life of the orthotic. To help ensure your patients get the best possible care, our Clinical Services Team adds an arch fill or strip based on the patient's weight. This orthotic is ideal for basketball shoes.

Posture and biomechanics of a player have a huge effect on the body. Leg length discrepancy can affect gait and possibly cause injury to the knee. Assessing a player's stride is a specialized skill. However, the Metascan™ System is a readily available tool to assess posture and biomechanics. You can assess walking mechanics with a gait and pressure analysis. Check out leg length discrepancy with a static scan. Evaluate whole-body mechanics by performing a postural analysis to determine weight transfers, pressure distributions and postural abnormalities.

Once the assessment is complete, a therapeutic regime is put into place. An essential part of that regime is often orthotic therapy. Orthotic therapy for a basketball player is essential in the gait

and running components of the game.

Our Pro-Basketball Flexx orthotic is designed as a multi-purpose device to support a player during running and play. The orthotic assists in proper biomechanics during walking, relieving foot, knee, hip and lower back stresses placed upon the body during play.

### Possible Injuries

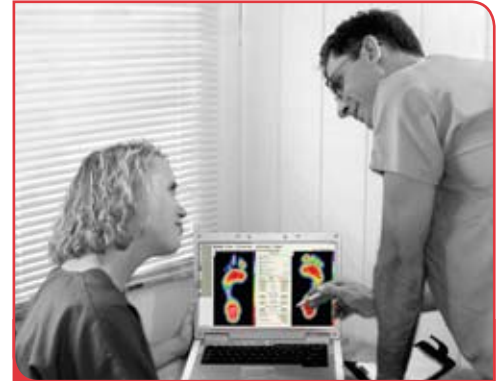
Plantar fasciitis, Achilles tendonitis and bunions can all occur from the intense activity associated with basketball. Running, jumping and making quick cuts are hard on the body. It is important to remember that Sportmaxx orthotics are specially made to take these possible biomechanics into account.

### Performance

This orthotic is ideal in basketball shoes. The more a person plays, the more susceptible the body is to overuse injuries, sprains and strains. For serious players, consider offering an "assessment/treatment package" that includes, dynamic, static and postural assessment with a treatment strategy that involves custom orthotics (if warranted) along with your usual treatment regime.

### Tips for Ordering

All Sportmaxx orthotics are designed to accommodate for the stresses placed on the lower extremities during sports.



## Ask A Doctor

**Q:** What is the best way to treat a patient with corns?

**A:** Corns are caused or aggravated by abnormal friction (instability or over-pronation) occurring between a bony prominence and also because pronation causes the foot to function like a "loose bag of bones." The result is hypermobility of the foot, causing the bony prominences to irritate and break down the soft tissue between the toes. When the "loose bag of bones" phase goes on too long, the skin is trapped between the bony prominences in the foot and the inside of the shoe, causing friction and irritation. The skin of the foot thickens to protect itself from the irritation but leaves even less room between itself and the inside of the shoe, resulting in pain.

Temporarily the corns can be cut away; however, since the problem is made worse by over-pronation, the patient should be fitted with an orthotic device that restricts the instability and reduces friction. The patient will likely experience comfort and relief within weeks.



## Patient Corner



## Hammer Toes

### What is it?

Hammer toes is a condition wherein there is a contracture of the proximal interphalangeal joint (usually in the second toe, but sometimes the third toe). It is extended at the metatarsophalangeal (MTP) joint, flexed at the proximal interphalangeal joint, and extended at the distal interphalangeal joint.

### What are the common symptoms/complaints?

Patients may feel pressure against the shoe and under the metatarsal head, particularly the second toe, which is often caused by the retrograde pressure on the big toe. Patients complain of pain felt on the dorsal aspect at the PIP joint of the hammer toe itself, usually due to a corn/callus that has developed. Once this happens, it is painful to wear regular shoes.

### How is it caused?

A hammer toe may be caused by improperly fitted shoes or a dropped metatarsal head which presses on the flexor tendon (flexor complex – the group of muscles running on the plantar surface of the toes). This pressure causes the proximal phalanx to remain dorsiflexed, and the toe becomes “hammered.” Some other causes are diabetes, arthritis, neuromuscular disease, polio or trauma.

### How is it treated?

First push up on the plantar surface of the metatarsal head and see if the toe straightens out. If it does, then an orthotic could correct the problem, usually with a metatarsal pad. If the toes do not straighten out when the metatarsal head is pushed up, then it indicates that contracture in the capsule and ligaments (capsule contracts because the joint was in the wrong position for too long) of the MTP joint has set in and surgery is required. Orthotics are required post-surgically.

## Case Study

### Patient:

17 year old female

### Complaints:

Dull, aching pain felt along the medial side of the tibia

### History:

High school student and active runner

### Clinical observations:

Any activity will aggravate the area

### Diagnosis:

Shin splints

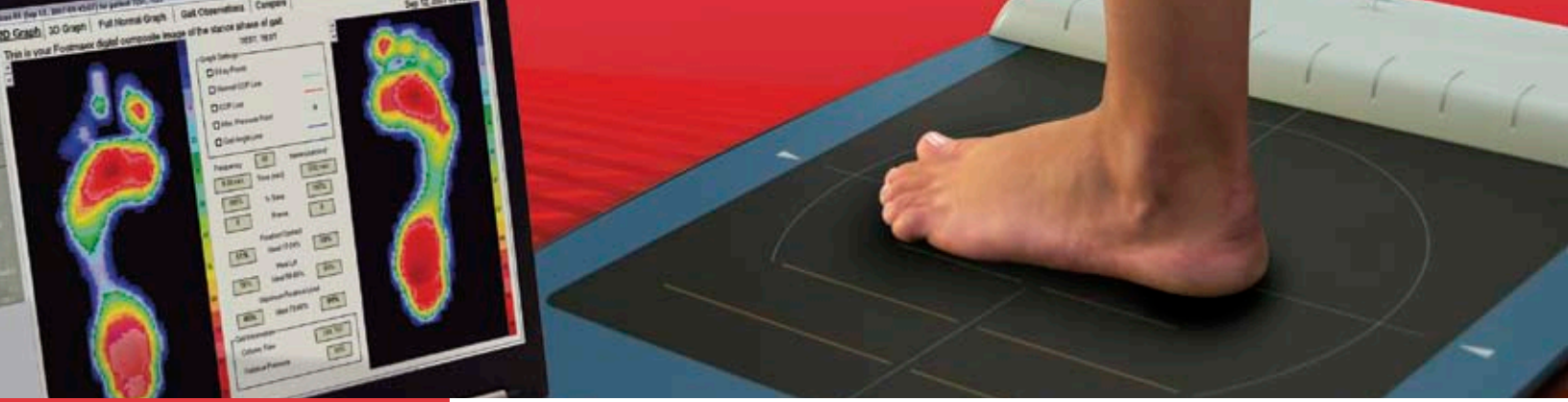
### Comments:

None.

### Treatment:

Depending on the severity of the injury, treatment may include standard acute care, restricted activity and an orthotic device that corrects the over-pronation and stops the foot from falling too far medially (reducing the strain on the tibialis posterior) and facilitates proper foot function and timing, reducing the stress on the tibialis anterior.





## Metascan™ Tip

To get the most out of your Metascan you should be scanning **every** patient! The more patients you scan, the more patients you will discover who need orthotics. The time you spend will also help you and your staff become comfortable and familiar with the software. Make scanning a part of your protocol and watch your practice grow!

The Metascan is a complete diagnostic system that tracks the 8 key landmarks along the foot through the gait, and is totally unique to Footmaxx. The system determines weight distribution and pressure, balance, sway and will generate a full report used in creating each custom orthotic. Since the Metascan software allows healthcare professionals to analyze gait function as well as a patient's balance, it can also show their center of gravity which is important for athletes. Custom-orthotics will help the body regain and maintain its natural balanced positioning.

P. O. Box 13633  
 Roanoke, VA 24035-3633  
 FA-1-1021-08 • ©2008 Footmaxx



PRSR1 STD  
 U.S. POSTAGE  
 PAID  
 Roanoke, VA  
 PERMIT NO. 513