



## Complete Summary

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### GUIDELINE TITLE

Heel spur syndrome.

### BIBLIOGRAPHIC SOURCE(S)

Academy of Ambulatory Foot and Ankle Surgery. Heel spur syndrome. Philadelphia (PA): Academy of Ambulatory Foot and Ankle Surgery; 2003. 6 p. [14 references]

### GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Academy of Ambulatory Foot and Ankle Surgery. Heel spur syndrome. Philadelphia (PA): Academy of Ambulatory Foot and Ankle Surgery; 2000. 12 p.

The guideline is reviewed and updated twice a year as needed (in May and October).

## \*\* REGULATORY ALERT \*\*

### FDA WARNING/REGULATORY ALERT

**Note from the National Guideline Clearinghouse:** This guideline references a drug(s) for which important revised regulatory information has been released.

On April 7, 2005, after concluding that the overall risk versus benefit profile is unfavorable, the FDA requested that Pfizer, Inc voluntarily withdraw Bextra (valdecoxib) from the market. The FDA also asked manufacturers of all marketed prescription nonsteroidal anti-inflammatory drugs (NSAIDs), including Celebrex (celecoxib), a COX-2 selective NSAID, to revise the labeling (package insert) for their products to include a boxed warning and a Medication Guide. Finally, FDA asked manufacturers of non-prescription (over the counter [OTC]) NSAIDs to revise their labeling to include more specific information about the potential gastrointestinal (GI) and cardiovascular (CV) risks, and information to assist consumers in the safe use of the drug. See the [FDA Web site](#) for more information.

Subsequently, on June 15, 2005, the FDA requested that sponsors of all non-steroidal anti-inflammatory drugs (NSAID) make labeling changes to their products. FDA recommended proposed labeling for both the prescription and over-the-counter (OTC) NSAIDs and a medication guide for the entire class of

prescription products. All sponsors of marketed prescription NSAIDs, including Celebrex (celecoxib), a COX-2 selective NSAID, have been asked to revise the labeling (package insert) for their products to include a boxed warning, highlighting the potential for increased risk of cardiovascular (CV) events and the well described, serious, potential life-threatening gastrointestinal (GI) bleeding associated with their use. FDA regulation 21CFR 208 requires a Medication Guide to be provided with each prescription that is dispensed for products that FDA determines pose a serious and significant public health concern. See the [FDA Web site](#) for more information.

## COMPLETE SUMMARY CONTENT

\*\* REGULATORY ALERT \*\*

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## SCOPE

### DISEASE/CONDITION(S)

Heel spur syndrome

### GUIDELINE CATEGORY

Diagnosis

Treatment

### CLINICAL SPECIALTY

Podiatry

### INTENDED USERS

Podiatrists

### GUIDELINE OBJECTIVE(S)

To provide recommendations for the diagnosis and treatment of heel spur syndrome

### TARGET POPULATION

Patients with heel spur syndrome

## **INTERVENTIONS AND PRACTICES CONSIDERED**

### **Diagnosis**

1. History, including an evaluation of the chief complaint (nature, location, duration, onset, course, anything that improves or exacerbates symptoms, any previous treatment) and past medical history (allergies/medications, medical history, surgical history, family history, social history)
2. Physical examination, including peripheral vascular, neurological, and orthopedic [palpation (direct/lateral pressure), biomechanical/gait analysis, range of motion]
3. Diagnostic procedures, including radiographic examination, laboratory tests, additional tests (nerve conduction studies, electromyography, noninvasive vascular testing)

### **Treatment**

1. Nonsurgical treatment, including padding and strapping (taping), orthotics, heel cup, shoe modifications, oral anti-inflammatory medications (NSAIDs), anti-inflammatory injectables (i.e., corticosteroids), injection of local anesthetics (i.e., peripheral nerve block), analgesics, physical therapy, extracorporeal shockwave therapy
2. Surgical treatment, including resection of inferior or calcaneal exostosis with plantar fasciotomy, plantar fasciotomy as an isolated procedure, calcaneal decompression, tendon lengthening/tenotomy/capsulotomy, autologous fat transfer
3. Postoperative management, including radiographs, follow-up visits, weight bearing/immobilization, and orthotics

## **MAJOR OUTCOMES CONSIDERED**

Not stated

## **METHODOLOGY**

### **METHODS USED TO COLLECT/SELECT EVIDENCE**

Searches of Electronic Databases

### **DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE**

The guideline development process began with a thorough MEDLINE search as well as a "call for papers" from the membership of the Academy of Ambulatory Foot and Ankle Surgery at large.

### **NUMBER OF SOURCE DOCUMENTS**

Not stated

## **METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE**

Not stated

## **RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE**

Not applicable

## **METHODS USED TO ANALYZE THE EVIDENCE**

Review

## **DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE**

Not applicable

## **METHODS USED TO FORMULATE THE RECOMMENDATIONS**

Not stated

## **RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS**

Not applicable

## **COST ANALYSIS**

A formal cost analysis was not performed and published cost analyses were not reviewed.

## **METHOD OF GUIDELINE VALIDATION**

Internal Peer Review

## **DESCRIPTION OF METHOD OF GUIDELINE VALIDATION**

Drafts of the guidelines were reviewed in detail by each member of the Board of Trustees.

# **RECOMMENDATIONS**

## **MAJOR RECOMMENDATIONS**

- I. Diagnosis
  - A. History may include any of the following:
    1. An evaluation of the chief complaint (including nature, location, duration, onset, course, anything that improves or exacerbates, and any previous treatment).

2. The past medical history (including allergies/medications, medical history, surgical history, family history, and social history).
- B. Physical examination may include:
1. Peripheral vascular
  2. Neurological
  3. Orthopedic
    - a. Palpation (direct/lateral pressure)
    - b. Biomechanical/gait analysis
    - c. Range of motion
- II. Diagnostic Procedures
- A. Radiographic examination: X-rays should be taken. They are necessary to confirm/rule out bony pathology. X-rays may be weight bearing, partial weight bearing, or non weight bearing.
  - B. Laboratory tests: Used to rule out inflammatory disease, infection, degenerative joint disease, systemic illness, etc.
  - C. Additional tests (nerve conduction studies, electromyography [EMG], noninvasive vascular testing): These studies may be utilized in isolated situations when deemed necessary.
  - D. Differential diagnosis may include:
    1. Plantar fasciitis without spur formation
    2. Bursitis (inferior or retrocalcaneal)
    3. Tendonitis
    4. Osteochondritis
    5. Periostitis
    6. Arthritis
    7. Fracture
    8. Neoplasms (malignant/benign)
    9. Neuritis
    10. Tarsal tunnel syndrome
    11. Neuroma
    12. Peripheral neuropathy
    13. Herniation of the plantar fat pad
    14. Haglund's deformity
    15. Infection (i.e., osteomyelitis, soft tissue)
    16. Gout
    17. Reflex sympathetic dystrophy
    18. Vascular insufficiency
    19. Systemic illness
    20. Medication induced (i.e., patients on thiazide diuretics)
- III. Nonsurgical Treatment
- A. Goals of treatment:
 

Conservative (nonsurgical) treatment is primarily geared to relieving symptomatology. In most cases, conservative care should be considered prior to surgery.
  - B. Types of treatment:
    1. Padding and strapping (taping)
    2. Orthotics
    3. Heel cup
    4. Shoe modifications

5. Oral anti-inflammatory medications (NSAIDs)
6. Anti-inflammatory injectables (i.e., corticosteroids)
7. Injection of local anesthetics (i.e., peripheral nerve block)
8. Analgesics
9. Physical therapy
10. Extracorporeal shockwave therapy

#### IV. Surgical Treatment

##### A. Goals of treatment:

The goal of surgical treatment is not only to relieve the symptom(s), but to correct the underlying deformities and to improve function as well.

##### B. The primary reasons for surgical treatment are:

1. Failure of nonsurgical treatment
2. Impracticality of nonsurgical treatment
3. The patient desires correction of a presenting deformity that is painful and/or causes a degree of loss of function
4. The patient is informed of the procedure(s) to be performed, the treatment alternatives, and the reasonable risks involved, and elects to have surgical intervention

##### C. Site of surgery:

The surgical treatment of heel spur syndrome may be performed in the doctor's office. The hospital or an ambulatory surgical center may also be appropriate.

##### D. Anesthesia:

Local anesthesia is sufficient, unless there are extenuating circumstances. Intravenous (I.V.) sedation may be utilized with this.

##### E. Hemostasis:

Absence of bleeding is not required via tourniquet, but may be utilized at the discretion of the surgeon.

##### F. Surgical preparation:

Aseptic preparation ("usual" aseptic scrub, prep, draping and sterile technique)

##### G. Preoperative lab:

Necessity based upon patient's past medical history and current medical status

##### H. Prophylactic antibiotics:

At the discretion of the surgeon (or based upon requirement: i.e., mitral valve prolapse)

- I. Pathological analysis of surgically removed tissue is recommended.
- J. Bilateral or multiple surgeries may be performed either at the same session or in different surgical sessions.
- K. Second opinion:

At the option of the patient or doctor

V. Surgical Procedures for the Treatment of Heel Spur Syndrome

These may include one or more of the following:

- A. Resection of inferior or calcaneal exostosis with plantar fasciotomy
- B. Plantar fasciotomy as an isolated procedure (i.e., endoscopic, minimally invasive surgery [MIS], or traditional approaches)
- C. Calcaneal decompression
- D. Tendon lengthening/tenotomy/capsulotomy may be used for heel spur syndrome in the event that the purpose of these procedures is both for treatment of the heel spur syndrome and the "hammertoe syndrome" as well.
- E. Autologous fat transfer

VI. Postoperative Management

- A. Radiographs: Should be taken immediately following surgery if osseous surgery has been performed. Additional x-rays as needed.
- B. Postoperative visits: In the absence of complications, the patient should initially be seen within the first week following the procedure(s). Subsequent visits are determined by the procedures performed and the postoperative course.
- C. Weight bearing/immobilization: Based upon the procedures performed and upon the individual patient, full, partial, or non-weight bearing may be utilized. Generally, a surgical dressing is applied in the immediate postoperative period. This is modified with time and the postoperative course. A postoperative shoe is usually indicated. Casting may or may not be necessary. The return to normal shoe is based upon the procedure(s) performed and the postoperative course of the individual patient.
- D. Orthotics: May be prescribed to improve biomechanics.

**CLINICAL ALGORITHM(S)**

None provided

**EVIDENCE SUPPORTING THE RECOMMENDATIONS**

**TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS**

The type of supporting evidence is not specifically stated for each recommendation.

## **BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS**

### **POTENTIAL BENEFITS**

Treatment may relieve or reduce pain, reduce the deformity, improve function, and arrest the progression of the deformity.

### **POTENTIAL HARMS**

#### **Postoperative Complications**

- Numbness
- Edema
- Pain
- Recurrence
- Hematoma
- Infection
- Painful and/or hypertrophic scar formation
- Adhesions
- Vascular complications
- Reflex sympathetic dystrophy
- Fracture
- Gangrene
- Tissue necrosis

## **IMPLEMENTATION OF THE GUIDELINE**

### **DESCRIPTION OF IMPLEMENTATION STRATEGY**

An implementation strategy was not provided.

## **INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES**

### **IOM CARE NEED**

Getting Better  
Living with Illness

### **IOM DOMAIN**

Effectiveness  
Patient-centeredness

## **IDENTIFYING INFORMATION AND AVAILABILITY**

### **BIBLIOGRAPHIC SOURCE(S)**

Academy of Ambulatory Foot and Ankle Surgery. Heel spur syndrome. Philadelphia (PA): Academy of Ambulatory Foot and Ankle Surgery; 2003. 6 p. [14 references]

**ADAPTATION**

Not applicable: The guideline was not adapted from another source.

**DATE RELEASED**

2000 (revised 2003 Sep)

**GUIDELINE DEVELOPER(S)**

Academy of Ambulatory Foot and Ankle Surgery - Medical Specialty Society

**SOURCE(S) OF FUNDING**

Academy of Ambulatory Foot and Ankle Surgery (AAFAS)

**GUIDELINE COMMITTEE**

Preferred Practice Guidelines Committee

**COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE**

The committee consisted of five (5) members who were board certified, had a minimum of ten (10) years of clinical practice experience, and a minimum of five (5) years of teaching experience.

**FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST**

Not stated

**GUIDELINE STATUS**

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The guideline is reviewed and updated twice a year as needed (in May and October).

**GUIDELINE AVAILABILITY**

Electronic copies: Not available at this time.

Print copies: Available from the Academy of Ambulatory Foot and Ankle Surgery (AAFAS) (formerly the Academy of Ambulatory Foot Surgery), 1601 Walnut Street, Suite 1005, Philadelphia, PA 19102; Web site, [www.academy-afs.org](http://www.academy-afs.org).

## **AVAILABILITY OF COMPANION DOCUMENTS**

None available

## **PATIENT RESOURCES**

None available

## **NGC STATUS**

This summary was completed by ECRI on October 12, 2000. The information was verified by the guideline developer as of December 8, 2000. This summary was updated by ECRI on December 19, 2003. The information was verified by the guideline developer on December 29, 2003. This summary was updated on May 3, 2005 following the withdrawal of Bextra (valdecoxib) from the market and the release of heightened warnings for Celebrex (celecoxib) and other nonselective nonsteroidal anti-inflammatory drugs (NSAIDs). This summary was updated by ECRI on June 16, 2005, following the U.S. Food and Drug Administration advisory on COX-2 selective and non-selective non-steroidal anti-inflammatory drugs (NSAIDs).

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