Diagnosis and Treatment of Forefoot Disorders. Section 4. Tailor’s Bunion

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This clinical practice guideline (CPG) is based upon consensus of current clinical practice and review of the clinical literature. The guideline was developed by the Clinical Practice Guideline Forefoot Disorders Panel of the American College of Foot and Ankle Surgeons. The guideline and references annotate each node of the corresponding pathways.

Tailor’s Bunion (Pathway 5)

Tailor’s bunion (also called bunionette) involves deformity of the fifth metatarsophalangeal joint (MPJ), much like a bunion that occurs medially. Although tailor’s bunion typically involves deformity with lateral prominence of the fifth metatarsal head, both lateral and plantar clinical pathology will be discussed in this document.

Numerous factors can contribute to the development of a tailor’s bunion. Structural causes include a prominent lateral condyle, a plantarflexed fifth metatarsal, a splay foot deformity, lateral bowing of the fifth metatarsal, or a combination of these deformities (1-5). In addition, there may be hypertrophy of the soft tissues over the lateral aspect of the metatarsal head (6). Other contributing factors may include a varus fifth toe, hallux valgus with abnormal pronation of the fifth metatarsal, hindfoot varus, and flatfoot (7).

Tailor’s bunion is seen most commonly in adolescents and adults. It has been reported that the mean age of presentation of tailor’s bunion is 28 years (range, 16–57 years) (8), with a female-to-male ratio greater than 2:1 (1).

Significant History (Pathway 5, Node 1)

The patient with a tailor’s bunion may or may not have pain related to the deformity. Patients who have symptoms may complain that they are exacerbated by footwear, as the prominence of the fifth metatarsal head results in increased pressure from shoes, leading to inflammation and pain. There also may be a history of localized swelling and/or callus formation.

Significant Findings (Pathway 5, Node 2)

The clinical examination of a patient with a tailor’s bunion will reveal a lateral or plantar-lateral prominence of the fifth metatarsal head (Fig. 1). Tenderness on palpation of the lateral and/or plantar-lateral fifth metatarsal head may be associated with an overlying adventitial bursa or hyperkeratotic lesion. Adduction or adductovarus deformity of the fifth toe may be present.

Radiographic Findings (Pathway 5, Node 3)

Standard weightbearing foot radiographs to evaluate tailor’s bunion include anterior-posterior, oblique, and lateral views. An increase in the fourth and fifth intermetatarsal angle usually is present (Fig. 2). The angle between the fourth and fifth metatarsal has been reported to range from 14.4° to 0.6° (average and mean values: 7.1° and 7.2°, respectively) among a standardized asymptomatic patient population (9). Bowing of the fifth metatarsal also may be revealed on radiographs. The lateral deviation angle describes the degree of lateral bowing that usually occurs at the distal third of the shaft of the fifth metatarsal. The mean normal value of this angle is 2.64° (range: 0°-7°) in patients without tailor’s bunion and 8° in patients with this deformity (1). Radiographs also may reveal a lateral exostosis of the fifth metatarsal head and/or significant adduction (or adductovarus) deformity of the fifth toe.

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TAILOR’S BUNION

SIGNIFICANT HISTORY
- +/- Pain
- Deformity
- Symptoms exacerbated by footwear
- +/- Swelling
- Hyperkeratosis

SIGNIFICANT FINDINGS
- +/- Painful plantar or lateral aspect of metatarsal head
- Deformity
- +/- Adduction 5th toe
- +/- Plantar or lateral hyperkeratosis or ulcer

Radiographs
- Lateral exostosis
- Large 5th MT IM angle
- 5th metatarsal bowing
- 5th toe deformity

Ancillary Studies
- MRI
- CT
- Tc scan

Tailor’s Bunion

ASYMPTOMATIC
- Advise - patient education
- Footwear recommendations

SYMPTOMATIC

NONSURGICAL TREATMENT
- Debridement of hyperkeratotic lesions
- Padding
- Footwear alteration
- Injections
- Orthotic devices/insoles

SURGICAL TREATMENT
- Exostectomy
- Osteotomy
- MT head resection

PATHWAY 5
FIGURE 1  (A) Tailor’s bunion deformity may be assessed radiographically with a lateral splaying in the distal fifth metatarsal. (B) Clinically, the patient generally presents with symptoms occurring laterally or plantarlaterally, often with an adduction of the fifth toe.

FIGURE 2 The intermetatarsal angle 4-5 may be measured with bisections of the fourth and fifth metatarsal or use of a tangent to the medial shaft of the fifth metatarsal. (From ACFAS Scoring Scale Manual, 2006)
Patients with a tailor’s bunion may present with a deformity that is due to (A) a symptomatic lateral or (B) plantar keratotic lesion.

Exostectomy for tailor’s bunion has been used, but it is associated with recurrent deformity and continued adduction of the fifth toe, as seen on these (A) presurgical and (B) postsurgical radiographs.
Optional Ancillary Studies (Pathway 5, Node 4)

Ancillary studies rarely are necessary to evaluate a tailor’s bunion deformity. When indicated, ancillary studies may include magnetic resonance imaging (MRI), computed tomography (CT), and technetium bone scan (10, 11).

Diagnosis (Pathway 5, Node 5)

The diagnosis of tailor’s bunion is predominantly a clinical one. However, radiographic findings, in particular, may be very helpful in the assessment of the exact nature of the deformity and contributory structural pathology.

Asymptomatic Tailor’s Bunion (Pathway 5, Node 6)

The asymptomatic patient with a tailor’s bunion deformity should be provided with patient education addressing the etiology of the condition and prevention of future symptoms. In particular, the patient should be given recommendations regarding proper footwear.

Symptomatic Tailor’s Bunion (Pathway 5, Node 7)

Nonsurgical treatment of tailor’s bunion deformity is centered on alleviating pressure and irritation over the fifth metatarsal head. This may be accomplished by footwear modifications and/or padding as well as debridement of associated hyperkeratotic lesions (Fig. 3). If an inflamed bursa is present, injection therapy may be indicated. Orthoses and padded insoles also may be beneficial in offloading the symptomatic area or in treating associated hindfoot varus or flatfoot deformity. Anti-inflammatory medication also may be used (12).

Surgical treatment is indicated for patients who have failed nonsurgical care and patients who are not candidates for nonsurgical care. The goal of surgical treatment is to decrease the prominence of the fifth metatarsal laterally. Selection of the surgical procedure is based on the physical evaluation and radiographic assessment. Surgical correction to alleviate the pain at the bone prominence varies from exostectomy (Fig. 4) to differing types of osteotomies (3, 13-23) (Fig. 5). Resection of the fifth metatarsal head for treatment of tailor’s bunion generally is indicated for salvage conditions or in the presence of unreconstructable deformities (12, 24) (Fig. 6).

In summary, tailor’s bunion is an inherited, progressive deformity that is frequently associated with certain foot types, aggravated by footwear, and painful when wearing normal shoes. Although nonsurgical measures may be used initially to reduce the symptomatology associated with this deformity, surgical repair is often necessary.
References

17. Friend G, Grace K, Stone HA. L-osteotomy with absorbable fixa-


