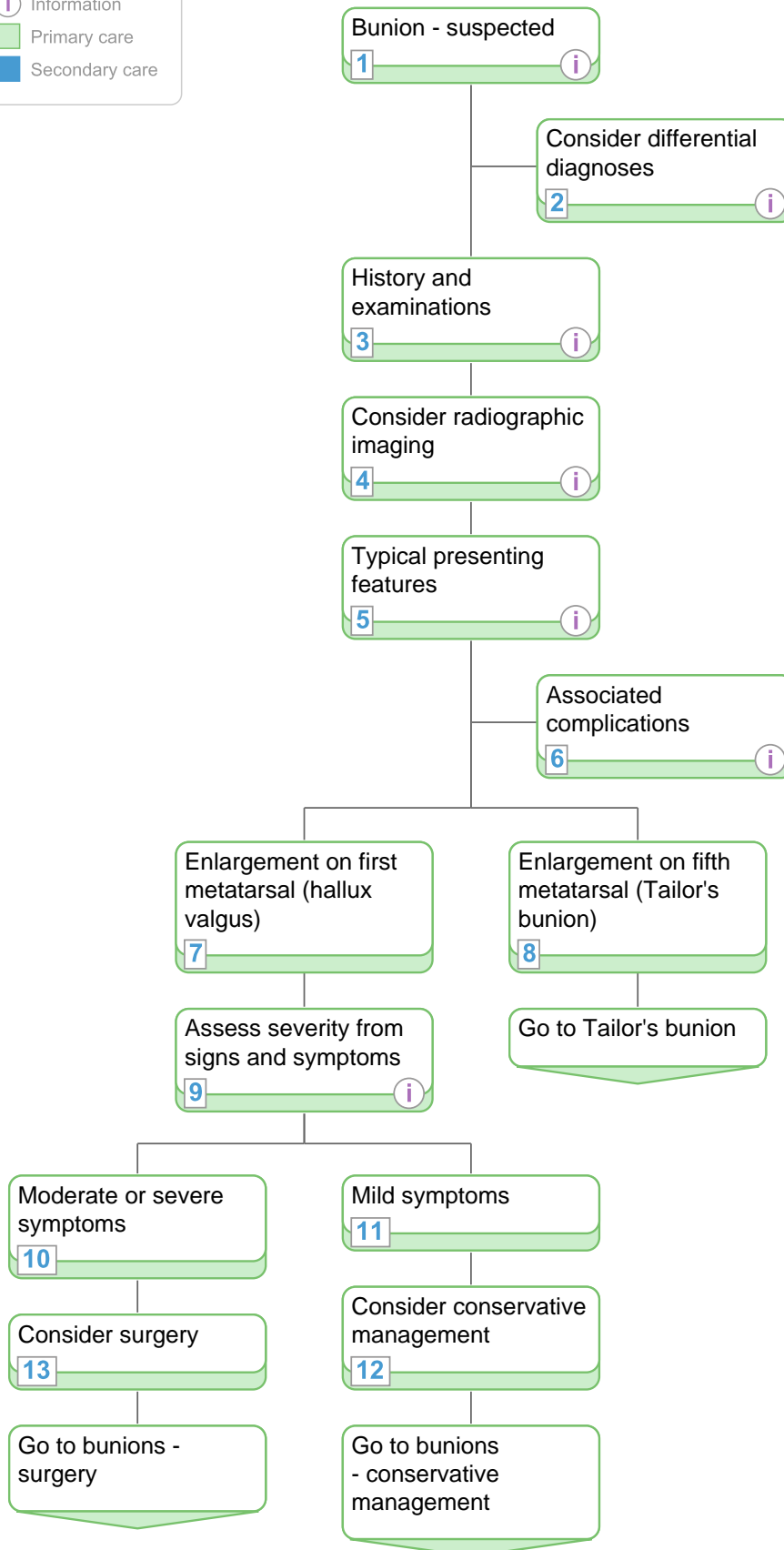


<http://healthguides.mapofmedicine.com/choices/map/bunions1.html>

i Information
 Primary care
 Secondary care



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Bunions - assessment

<http://healthguides.mapofmedicine.com/choices/map/bunions1.html>

1 Bunion - suspected

Quick info:

Scope:

- initial assessment and management of hallux valgus deformity (bunion) and bunions (Tailor's bunion) in adults

Hallux valgus (bunion):

- definition:
 - deformity of the first metatarsal (great toe/hallux) caused by abduction and valgus rotation
 - metatarsal head inclines towards the midline of the body and becomes prominent
 - 'bunion' describes the prominent and inflamed metatarsal head
- prevalence:
 - unclear
 - 2.5% of UK children age 9-10 years
 - 48% of adults
 - more common in female patients
- causes:
 - idiopathic, progressive deformity
 - aggravated by ill-fitting shoe wear

Tailor's bunion (bunionette):

- definition:
 - deformity on lateral aspect of fifth metatarsal head
- incidence and prevalence:
 - incidence and prevalence of bunionette is not known
 - less common than hallux valgus
 - more common in female patients
- causes:
 - structural abnormalities
 - postoperative complications
 - inflammatory arthropathies
 - footwear
 - posture while working

References:

Intracorp. Bunions. Philadelphia, PA: Intracorp; 2005.

Ferrari J. Bunions. Clin Evid 2005; 1377-87.

Koti M and Maffuli N. Current concepts review: Bunionette. J Bone Joint Surg. AM 2001; 83: 1076-82.

2 Consider differential diagnoses

Quick info:

- joint trauma
- tendonitis
- bursitis
- fibrositis
- gout
- rheumatoid arthritis
- degenerative joint disease
- tenosynovitis

Reference:

Intracorp. Bunions. Philadelphia, PA: Intracorp; 2005.

3 History and examinations

Quick info:

History:

- determine the following:
 - duration of complaint
 - onset

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- family history of bunions
- general medical history
- treatment and surgical history
- history of long distance running or ballet dancing
- type of footwear

Examination:

- biomechanics (examine gait)
- dermatology (look for lesions or hyperkeratosis)
- orthopaedics (palpate foot to determine range of motion)
- neurology
- vascular

Consider laboratory tests to rule out:

- possible degenerative joint disease
- inflammatory disease
- systemic illness

References:

Vanore J, Christensen J, Kravitz S. Diagnosis and treatment of first metatarsophalangeal joint disorders. Section 1: Hallux valgus. J Foot Ankle Surg 2003; 42: 112-23.

Intracorp. Bunions. Philadelphia, PA: Intracorp; 2005.

Academy of Ambulatory Foot and Ankle Surgery (AAFAS). Hallux Abductovalgus. Philadelphia, PA: AAFAS; 2003.

4 Consider radiographic imaging

Quick info:

- use radiographic evaluation to assess severity of deformity and to guide management decision
- patient should be weight-bearing during imaging
- image should be in anteroposterior and lateral planes
- some guidelines suggest that radiographs need only be taken if surgery is being considered

For hallux valgus:

- assess hallux valgus angle (HVA):
 - HVA formed by intersection of lines along long axis of proximal phalanx and first metatarsal
 - normal HVA less than 15°
- assess angle between first and second intermetatarsals (IMAs):
 - IMAs formed by longitudinal bisections of the first and second metatarsals
 - normal IMA less than 9°

References:

Vanore J, Christensen J, Kravitz S. Diagnosis and treatment of first metatarsophalangeal joint disorders. Section 1: Hallux valgus. J Foot Ankle Surg 2003; 42: 112-23.

Intracorp. Bunions. Philadelphia, PA: Intracorp; 2005.

5 Typical presenting features

Quick info:

Hallux valgus:

- prominence of first metatarsal head
- elevated hallux valgus angle (HVA; greater than 15°)
- elevated intermetatarsal angle (IMA; greater than 9°)
- lateral adaptation of metatarsal articular surface
- lateral displacement of sesamoids
- axial rotation of hallux
- painful bunion
- bursae
- callus

Tailor's bunion:

- enlargement of bursa on lateral aspect of fifth metatarsal head
- increased intermetatarsal angle between fourth and fifth metatarsals
- medial angulation of phalanx

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- curvature of fifth metatarsal

Reference:

Vanore J, Christensen J, Kravitz S. Diagnosis and treatment of first metatarsophalangeal joint disorders. Section 1: Hallux valgus. J Foot Ankle Surg 2003; 42: 112-23.

6 Associated complications

Quick info:

Hallux valgus:

- overlap or underlap of second toe
- sesamoiditis
- metatarsalgia
- dorsal exostosis
- pain and contracture of lesser digits
- plantar callus
- ingrown toenails
- neuritis
- arthritis
- extensor hallucis longus tendon contraction
- infection of the bursa (suppurative bursitis)

Tailor's bunion:

- painful keratoses:
 - more commonly on lateral aspect of metatarsal head
 - also on dorsal and plantar surfaces
 - erythema or oedema of fifth toe may lead to infection or ulceration

References:

Vanore J, Christensen J, Kravitz S. Diagnosis and treatment of first metatarsophalangeal joint disorders. Section 1: Hallux valgus. J Foot Ankle Surg 2003; 42: 112-23.

Academy of Ambulatory Foot and Ankle Surgery (AAFAS). Hallux Abductovalgus. Philadelphia, PA: AAFAS; 2003.

9 Assess severity from signs and symptoms

Quick info:

- treatment decision should be based on extent of deformity and severity of associated symptoms
- on initial evaluation, use clinical judgement when deciding whether to manage conservatively or non-conservatively
- hallux abductus angle is abnormal when more than 14.5°:
 - symptoms can be severe, including pain, problems with normal footwear and walking limitations
 - inflamed bursa can become infected and/or ulcerated

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Bunions - assessment

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Key Dates

Due for review: 30-Nov-2010

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Accreditations

The editorial process used to create this pathway is accredited by:

NHS Institute for Innovation and Improvement:

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Due for review: 30-Nov-2010

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Certifications

The evidence for this pathway is certified by:

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Certification attained: 31-Jul-2009

Due for review: 31-Jul-2010

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Evidence summary for Bunions - assessment

The pathway is consistent with the following quality-appraised guidelines (6, 1, 2). All intervention nodes have been assessed for consistency with high quality guidelines and underlying evidence.

Search date: Jan-2006

Evidence grades:

- 1** Intervention node supported by level 1 guidelines or systematic reviews
- 2** Intervention node supported by level 2 guidelines
- E** Intervention node based on expert clinical opinion
- U** Non-intervention node, not graded

Evidence grading:

Graded node titles that appear on this page

Bunion - suspected

Consider differential diagnoses

History and examinations

Consider radiographic imaging

Typical presenting features

Associated complications

Evidence grade

U

U

U

U

U

U

Reference IDs

6, 4

6

8, 6, 1

8, 6

8

8, 1

References

This is a list of all the references that have passed critical appraisal for use in the pathway Bunions

ID Reference

- 1 Academy of Ambulatory Foot and Ankle Surgery. Hallux abductovalgus. Philadelphia, PA: Academy of Ambulatory Foot and Ankle Surgery; 2003.

http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=4240&nbr=003240&string=hallux

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Bunions - assessment

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ID Reference

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- 7 Koti M and Maffulli N. Current concepts review: Bunionette. J Bone Joint Surg Am 2001; 83: 1076-1082.
- 8 Vanore JV, Christensen JC, Kravitz SR. Diagnosis and treatment of first metatarsophalangeal joint disorders. Section 1: Hallux valgus. J Foot Ankle Surg 2003; 42: 112-123.
<http://www.jfas.org/article/PIIS1067251603003922/fulltext>

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