Bunion - suspected

1. Consider differential diagnoses

2. History and examinations

3. Consider radiographic imaging

4. Typical presenting features

5. Associated complications

6. Enlargement on first metatarsal (hallux valgus)

7. Assess severity from signs and symptoms

8. Enlargement on fifth metatarsal (Tailor's bunion)

9. Go to Tailor's bunion

10. Moderate or severe symptoms

11. Mild symptoms

12. Consider conservative management

13. Go to bunions - surgery
1 Bunion - suspected

Quick info:
Scope:
• initial assessment and management of hallux valgus deformity (bunion) and bunionettes (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:

2 Consider differential diagnoses

Quick info:
• joint trauma
• tendonitis
• bursitis
• fibrositis
• gout
• rheumatoid arthritis
• degenerative joint disease
• tenosynovitis

Reference:

3 History and examinations

Quick info:
History:
• determine the following:
  • duration of complaint
  • onset
Bunions - assessment

- 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:

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:

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 phalax
Bunions - assessment

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

- curvature of fifth metatarsal

Reference:

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:

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
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
3. Intervention node based on expert clinical opinion
4. Non-intervention node, not graded

Evidence grading:

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References

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

ID Reference
ID Reference


http://www.ifas.org/article/PIIS1067251603003922/fulltext

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Last reviewed: 27-Apr-2009  Due for review: 30-Nov-2010  Printed on: 09-Nov-2009  © Map of Medicine Ltd  All rights reserved

IMPORTANT NOTE

Last reviewed refers to the date of completion of the most recent review process for a pathway. All pathways are reviewed regularly every twelve months, and on an ad hoc basis if required.