

Identifying and Managing Common Foot Conditions in the Elderly

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Faculty/Presenter Disclosure

- **Faculty: Jean Nunes Beeho**
- **Relationships with commercial interests:**
 - none

Learning Objectives

- Recognize common foot conditions that affect the elderly and opportunities for treatment.
- Appreciate the role that orthotics and other assistive devices can play in better foot health and care.
- Understand the role that chiropodists can play in the care of your older patients.

Foot conditions and the older population:

- High incidence of foot problems
 - Conditions maybe local or may result from complications associated with multiple chronic diseases as well as the local foot changes associated with the aging process itself and the residual effects of repetitive injury over the course of an individuals lifetime
 - Need for foot health service increases with age



Commonly reported foot complaints

- 89.5% reported a history of toenail changes
- 74.6% indicated pain at the time of assessment
- 51.0% complained of hyperkeratosis

JAMA 94(3):293-304, 2004

Access to Foot Care

- Importance of foot care is often overlooked
 - Foot problems seen as a “minor” problem in comparison to other systemic conditions
 - Regard foot problems as normal changes during the aging process
 - Diabetic patients or patients with vascular disease receive education on foot care, however most older patients do not receive education on foot care



Importance of Foot Health

- Two key factors that determine the patient's ability to remain self-sufficient and independent
 - keen mind and ability to move about or walk
- Ability to prevent foot complications and maintain mobility and ambulation will be reflected by their ability to preserve a high quality of life and independence



Impact of Reduced Mobility

- Reduces physiological wellbeing
- Gives rise to declining health, emotional and personality changes
- Increased risk of falls
- Increased risk of amputation
- Increased risk of hospitalization
- Social isolation
- Low self image
- Increased risk of institutionalization



The Chiropodist's Role in the Foot Care of the Older Patient

- Focus on prevention, health promotion, the treatment and management of the foot and related problems, disability, deformity and the pedal complications of chronic diseases
- Involves the evaluation of the foot and gait, including attention to footwear
- Goal – fall prevention, maintain function, eliminate or minimize pain and promote an active lifestyle

A Visit to the Chiroprapist Involves:

- Thorough patient history to identify systemic conditions that may impact the lower limb
- Physical Assessment
 - Vascular
 - Neurological
 - Dermatological
 - Musculoskeletal
 - Gait
 - Footwear
 - Functional Assessment

Vascular Assessment

- Assess for trophic changes
- Pedal pulses
- Temperature Gradient
- Edema



Neurological Assessment

- Sensory changes
 - Vibration
 - Protective sensation with the 5.07 monofilament
 - proprioception
- Motor changes
 - Reflexes
 - Muscle power



Dermatological Assessment

- Assess the nails
 - Changes to nail growth, condition, shape
- Assess skin of the lower limb
 - Dorsum, plantar and interdigital
 - Hyperkeratotic lesions
 - Tissue breakdown



Musculoskeletal Assessment

- Non-weightbearing:
 - Joint range of motion
 - Digital deformity
- Weightbearing:
 - Foot type
 - Gait



Footwear Assessment

- Footwear fit
 - Length
 - Width
 - Depth
 - Girth
 - toebox
 - Stability
 - Sole
 - Style
- Appropriate for activity
- Footwear at home



Functional Assessment

- Identify patients capabilities and limitations
 - Maintaining hygiene
 - Nail care
 - Changing their footwear and hosiery
 - Touch and inspect feet
 - Change a dressing
 - Apply cream
- Physical Alterations
 - Diminished visual acuity
 - Decreased manual dexterity
 - Reduced flexibility of the back, hips and knees
 - obesity

The Assessment Process

- Assessment process
 - assess the foot problem and its impact on lifestyle, risk assessment, foot care, patient education and if need be referral for systemic care

Common Foot Conditions in the Older Patient: Vascular findings

Arterial Insufficiency



Venous Insufficiency



Common Foot Conditions in the Older Patient: Neurological findings

- Sensory changes related to neuropathy in diabetic and non-diabetic patients
 - 64% sensory loss
 - 42% sensory loss and deformity or sensory loss and history of ulcerations
- The relationship between foot neuropathy and foot ulceration is significant



Common Foot Conditions in the Older Patient: Dermatologic findings

Onychauxis



Onychomycosis



Common Foot Conditions in the Older Patient: Dermatologic findings

Hyperkeratosis



Xerosis



Common Foot Conditions in the Older Patient: Musculoskeletal findings

Hallux Valgus

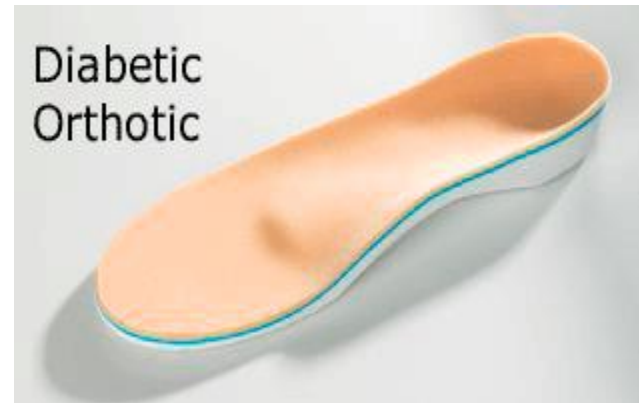


Hammer and Claw toes



Role of Orthotics and other devices in Foot Care

- Orthotics can functionally correct and accommodate foot conditions
 - Support
 - Deflect pressure
 - Cushioning



Role of Orthotics and other devices in Foot Care

Interdigital devices



Plantar Metatarsal Pads



Patient education

- Daily foot inspection
- Basic foot care
- Foot exercise for promoting circulation
- Footwear selection
- Warning signs of conditions which warrant medical attention

Take Home Message

- Older patients are at high risk of developing foot-related disease
 - Finding complications at their onset, preventing the progression of disease to minimize complications, reduce limitations on ambulation and help maintain a high quality of life and independence

Multiple Choice Questions

1. The most commonly reported foot complaint by the older patient is:
 - a) Foot deformity
 - b) Edema
 - c) Toenail changes
 - d) Pain

2. What are foot orthotics used for?
 - a) Provide functional control
 - b) Deflect pressure points
 - c) Provide cushioning
 - d) All of the above

Multiple Choice Questions

3. A referral is required for a patient to be seen by a Chiropodist?
- a) True
 - b) False