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Keywords: Hammer toes; Patient; Footwear

Introduction

Hammer toes, characterized by an abnormal bending of the toes, are a prevalent foot deformity that affects a substantial number of individuals. This condition can lead to pain, discomfort, and functional limitations, significantly impacting an individual's quality of life. Understanding the causes, accurate diagnosis, and appropriate treatment options are crucial for effectively managing hammer toes [1,2].

Hammer toes typically develop due to a combination of structural abnormalities and external factors. The imbalance in muscle or tendon function within the foot can lead to an abnormal pulling of the toes, resulting in their abnormal bending. This imbalance may be attributed to intrinsic factors such as genetic predisposition or underlying foot deformities [3-7]. Extrinsic factors, including improper footwear choices, such as high heels or narrow-toe shoes, can exacerbate the condition and contribute to its development.

Diagnosing hammer toes involves a comprehensive clinical evaluation. A healthcare professional, often a podiatrist or orthopedic specialist, will assess the patient's medical history, conduct a physical examination, and inquire about any associated symptoms [8-11].

This examination may involve evaluating the flexibility of the toes, assessing joint mobility, and identifying any areas of pain or discomfort. Diagnostic imaging techniques, such as X-rays or ultrasound, may be utilized to assess the severity of the deformity and identify any additional abnormalities or joint damage.

Treatment options for hammer toes encompass both non-surgical and surgical approaches, depending on the severity of the deformity and the patient's individual needs. Non-surgical interventions aim to alleviate pain, reduce discomfort, and improve foot function. These may include footwear modifications, such as wearing roomier shoes with adequate toe space, using orthotic devices or toe splints to maintain

proper alignment, and engaging in exercises or physical therapy to stretch and strengthen the affected muscles and tendons [12-15].

In cases where conservative measures fail to provide relief or when the deformity is severe, surgical intervention may be considered. The specific surgical technique employed will depend on the nature and extent of the deformity, with options including tendon releases, joint fusions, or corrective osteotomies. Surgical correction aims to restore proper toe alignment, alleviate symptoms, and improve overall foot function.

To effectively manage hammer toes, a multidisciplinary approach is often necessary. Collaboration between podiatrists, orthopedic surgeons, and physical therapists allows for a comprehensive evaluation and tailored treatment plan that addresses the specific needs of each patient. Patient education is crucial in emphasizing the importance of appropriate footwear choices and providing preventive measures to reduce the risk of recurrence.

This comprehensive review aims to provide a detailed examination of the causes, diagnosis, and treatment options for hammer toes. By enhancing our understanding of this condition, healthcare professionals can deliver optimal care, improve patient outcomes, and contribute to the overall well-being of individuals affected by hammer toes.

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Discussion

Hammer toes are a common foot deformity that can cause significant discomfort and functional limitations for affected individuals. This comprehensive review has examined the causes, diagnosis, and treatment options for hammer toes, highlighting the importance of a multidisciplinary approach in managing this condition effectively.

The causes of hammer toes can be attributed to both intrinsic and extrinsic factors. Intrinsic factors, such as genetic predisposition and underlying foot deformities, contribute to the structural abnormalities that result in toe misalignment. Extrinsic factors, particularly inappropriate footwear choices, play a significant role in exacerbating the condition. High heels and narrow-toe shoes can cause compression and constriction of the toes, contributing to the development and progression of hammer toes. Understanding these causative factors is crucial in developing preventive strategies and educating patients on appropriate footwear selection.

Accurate diagnosis of hammer toes is essential to guide appropriate treatment interventions. A comprehensive clinical evaluation, including a thorough medical history and physical examination, forms the basis of diagnosis. Assessing toe flexibility, joint mobility, and identifying any associated symptoms are critical components of the examination. Diagnostic imaging techniques, such as X-rays or ultrasound, can provide valuable insights into the severity of the deformity, any joint damage, and aid in treatment planning.

The treatment of hammer toes involves a range of non-surgical and surgical options. Non-surgical interventions focus on relieving pain, reducing discomfort, and improving foot function. These interventions are

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