

MORTON'S NEUROMA

IS A COMMON AND PAINFUL CONDITION OF THE FOREFOOT

IRRITATION AND THICKENING
OF A DIGITAL NERVE

3RD INTERMETATARSAL SPACE

NOT A TRUE NEUROMA (TUMOUR)
BUT A COMPRESSIVE NEUROPATHY

PLANTAR VIEW

ANATOMY

3RD COMMON DIGITAL NERVE
THICKER AND LESS TOLERANT OF COMPRESSION

SURROUNDING STRUCTURES
↓ SPACE
↑ MECHANICAL STRESS

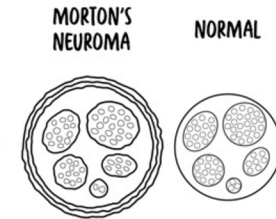
MEDIAL PLANTAR NERVE
LATERAL PLANTAR NERVE

PLANTAR VIEW

CORONAL VIEW

INTERMETATARSAL BURSA
METATARSAL HEADS
DEEP TRANSVERSE
METATARSAL LIGAMENT
COMMON
PLANTAR DIGITAL NERVE

PATHOPHYSIOLOGY



REPEATED COMPRESSION
AND SHEAR FORCES

-> PERINEURAL FIBROSIS
-> NERVE SWELLING
-> DEGENERATION

NOT ACUTE INFLAMMATION

HISTOLOGY:
NERVE THICKENING WITH FIBROTIC CHANGES

SYMPTOMS ARE ACTIVITY-RELATED
ANTI-INFLAMMATORIES MAY BE INSUFFICIENT

CONTRIBUTING FACTORS
NARROW OR HIGH-HEELED FOOTWEAR
FOREFOOT OVERLOAD
ALTERED BIOMECHANICS
HIGH-IMPACT ACTIVITIES



CLINICAL FEATURES

FOCAL TENDERNESS

SENSATION OF "WALKING ON A PEBBLE"
FOLDED SOCK UNDER THE FOOT

NUMBNESS OR TINGLING

MULDER'S SIGN

COMPRESSION ->
PAIN OR A PALPABLE CLICK

BURNING, SHARP, OR ELECTRIC
SHOCK-LIKE PAIN

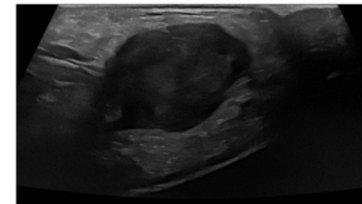
WORSE WITH
WALKING, TIGHT SHOES
PROLONGED STANDING

IMPROVE WITH
SHOE REMOVAL OR FOOT MASSAGE

DIAGNOSIS

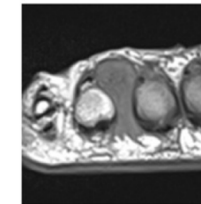
CLINICAL
HISTORY AND EXAMINATION

INSTRUMENTAL



ULTRASOUND
NERVE ENLARGEMENT
BURSITIS
GUIDING INJECTIONS

CASE COURTESY OF FARAH ABU JEBBEH,
RADIOPAEDIA.ORG, RID: 198441



MRI
ATYPICAL CASES
ALTERNATIVES SUSPECTED

CASE COURTESY OF FARAH ABU JEBBEH,
RADIOPAEDIA.ORG, RID: 198441

DIAGNOSIS

DIFFERENTIAL
DIAGNOSIS



METATARSALGIA



STRESS FRACTURE



INTERMETATARSAL
BURSITIS



PLANTAR PLATE
INJURY



INFLAMMATORY
ARTHRITIS

MANAGEMENT

1. FOOTWEAR AND
ACTIVITY MODIFICATION

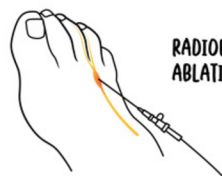


WIDE TOE BOX, LOW HEEL

2. PAIN CONTROL



SIMPLE ANALGESICS
CORTICOSTEROID INJECTIONS + US



RADIOFREQUENCY
ABLATION

3. SURGICAL INTERVENTION

DECOMPRESSION OF THE
TRANSVERSE METATARSAL
LIGAMENT

EXCISION OF THE
AFFECTED NERVE

COMPLICATION:
PERMANENT NUMBNESS

PROGNOSIS AND PREVENTION



EARLY RECOGNITION AND
FOOTWEAR MODIFICATION

SHOE CHOICE
FOREFOOT LOAD MANAGEMENT
EARLY SYMPTOM RECOGNITION

PROGNOSIS IS GOOD

PREVENTING CHRONIC PAIN
AND FUNCTIONAL LIMITATION



MOST INDIVIDUALS

CONSERVATIVE
MANAGEMENT

NORMAL ACTIVITIES

Armando H. Faigl