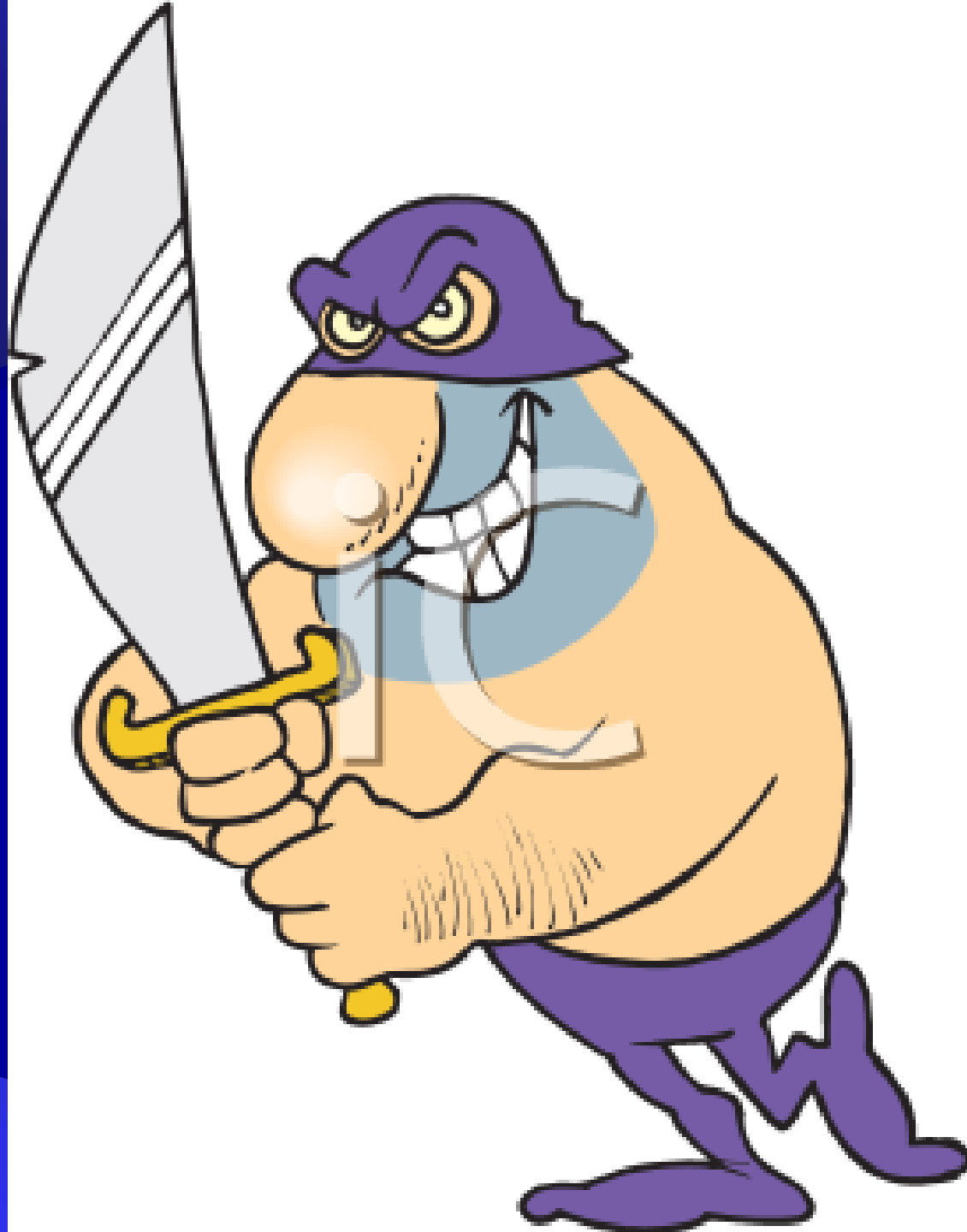




*Παραπομπή ασθενών με οστεοαρθρίτιδα
ή άλλες δυσμορφίες χεριού ή ποδιού
για επανορθωτική χειρουργική*

Δρ Εμμανουήλ Δ. Σταμάτης, FACS

*Χειρουργός-Ορθοπαιδικός
401 ΓΣΝΑ*



A Qualitative Assessment of Rheumatoid Hand Surgery in Various Regions of the World

Sandra V. Kotsis, MPH, Kevin C. Chung, MD, *Ann Arbor, MI*

The Journal of Hand Surgery / Vol. 30A No. 4 July 2005

Interdisciplinary differences exist between hand surgeons and rheumatologists in all of the countries visited. Hand surgeons still lament that rheumatologists refer patients for hand reconstruction too little and too late.

an interest in rheumatoid hand surgery, there is a responsibility to reach out and collaborate with rheumatologists. This can be done either through educational seminars or more importantly by devoting time and effort into participating in combined rheumatology and hand surgery clinics so that both specialties have an understanding of the other's role in the care of rheumatoid patients. Rheumatoid patients should not be considered to be the proprietary patients of the rheumatologists because many specialties can work collaboratively in enhancing the quality of life for these patients. Working side by side in clinics and conducting outcomes research in hand surgery, both specialties can gain valuable insight into the care of the rheumatoid population.

Αρθρίτιδα (φλεγμονώδης, εκφυλιστική, μετατραυματική)

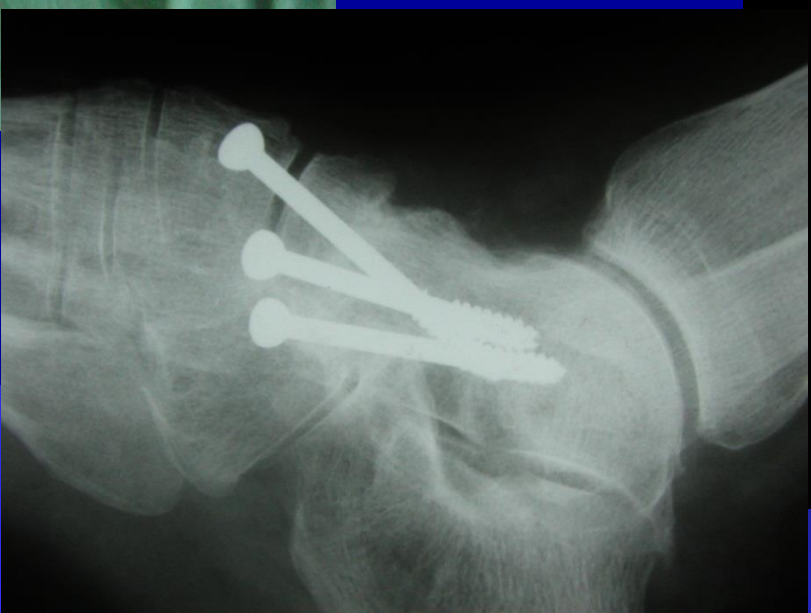
Παραμορφώσεις λόγω παθολογίας τενόντων

Παραμορφώσεις προσθίου ποδός



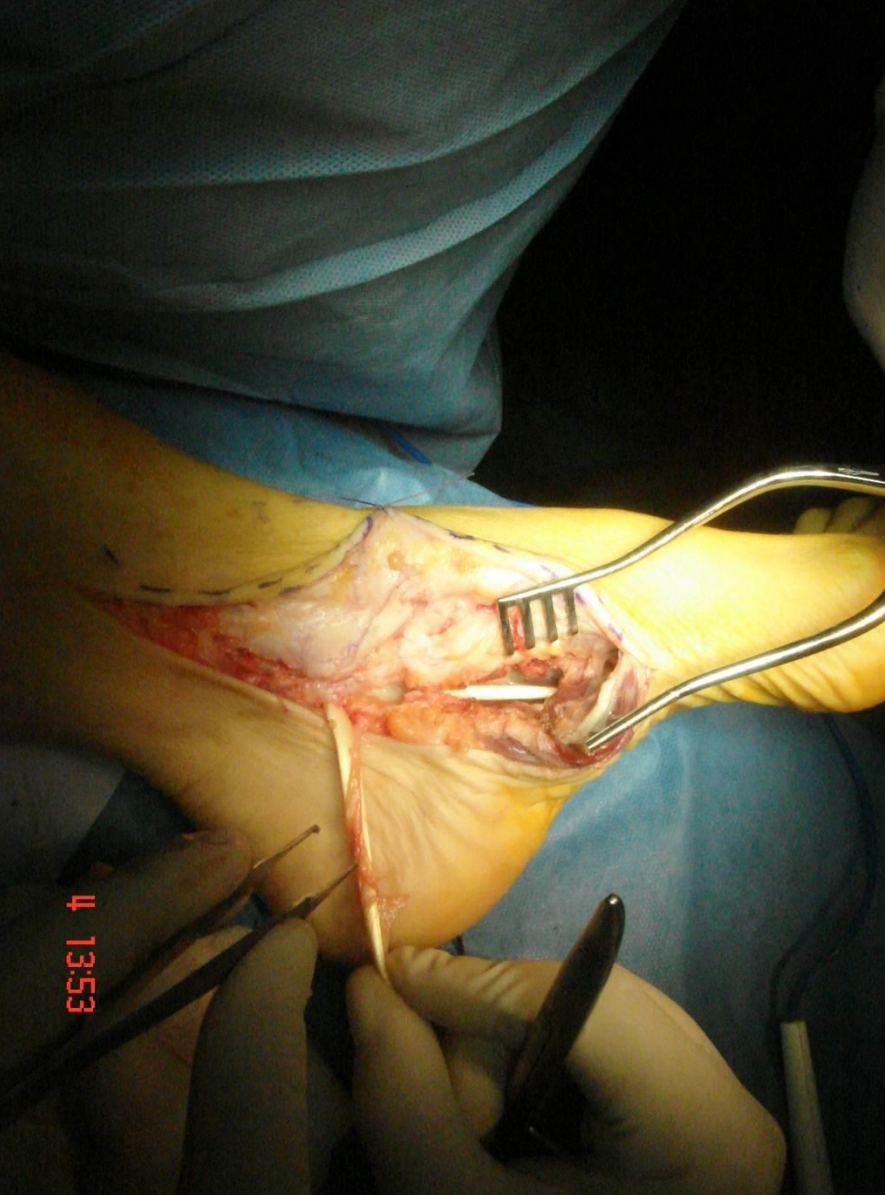


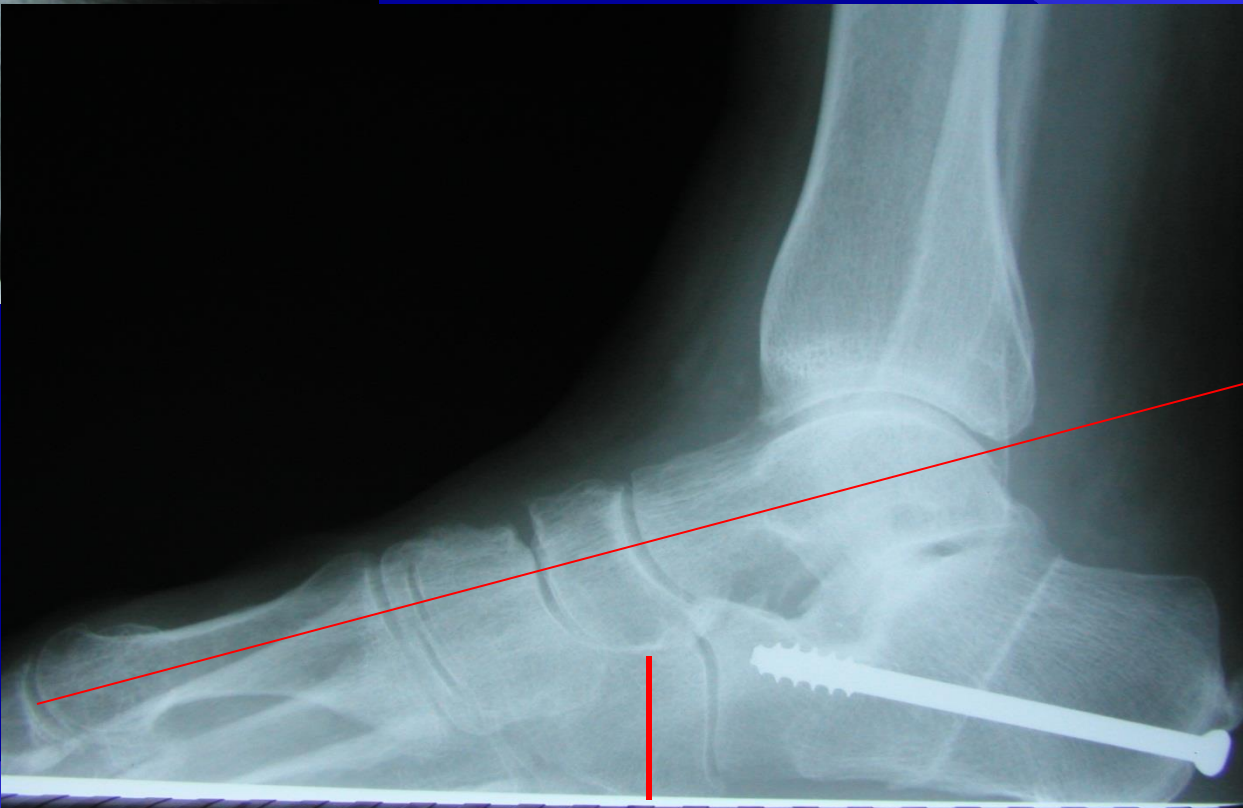
20 16:53



5 19:05

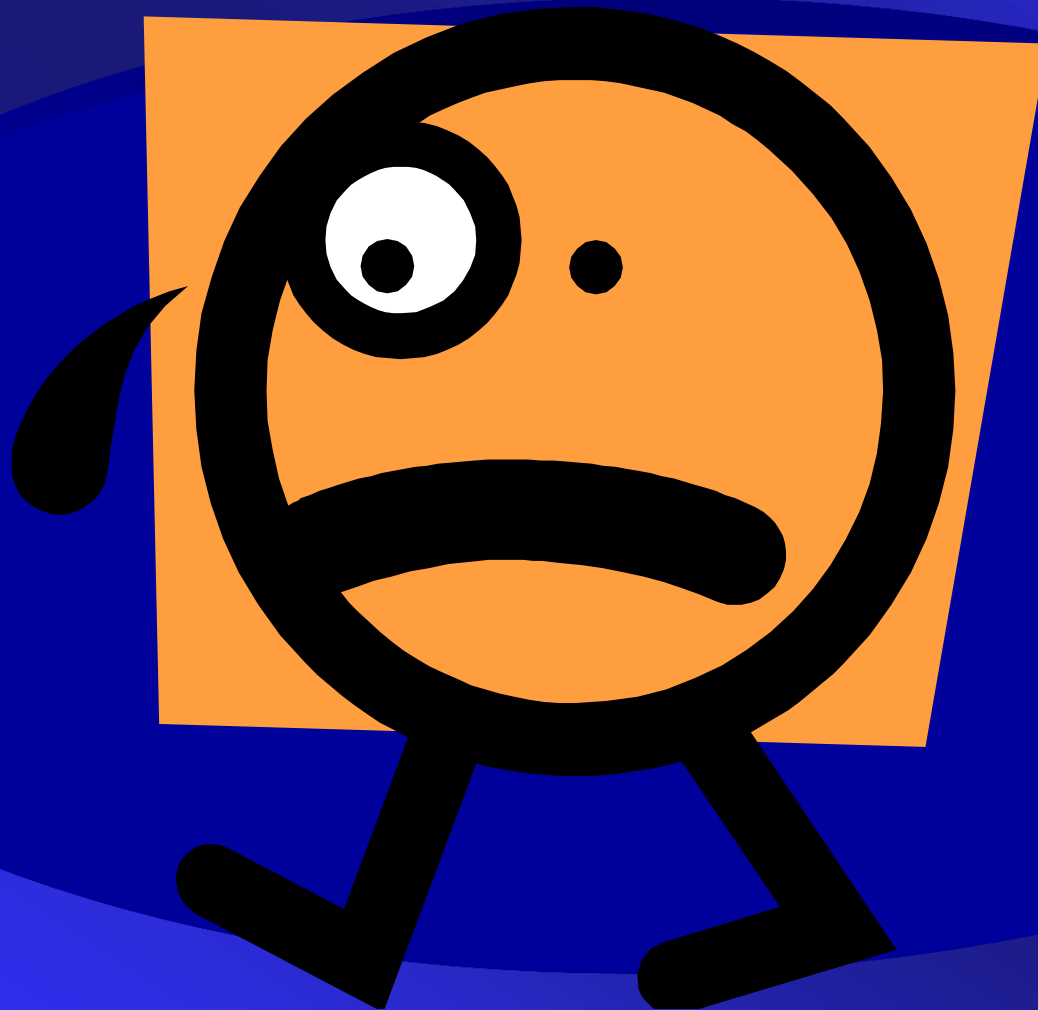




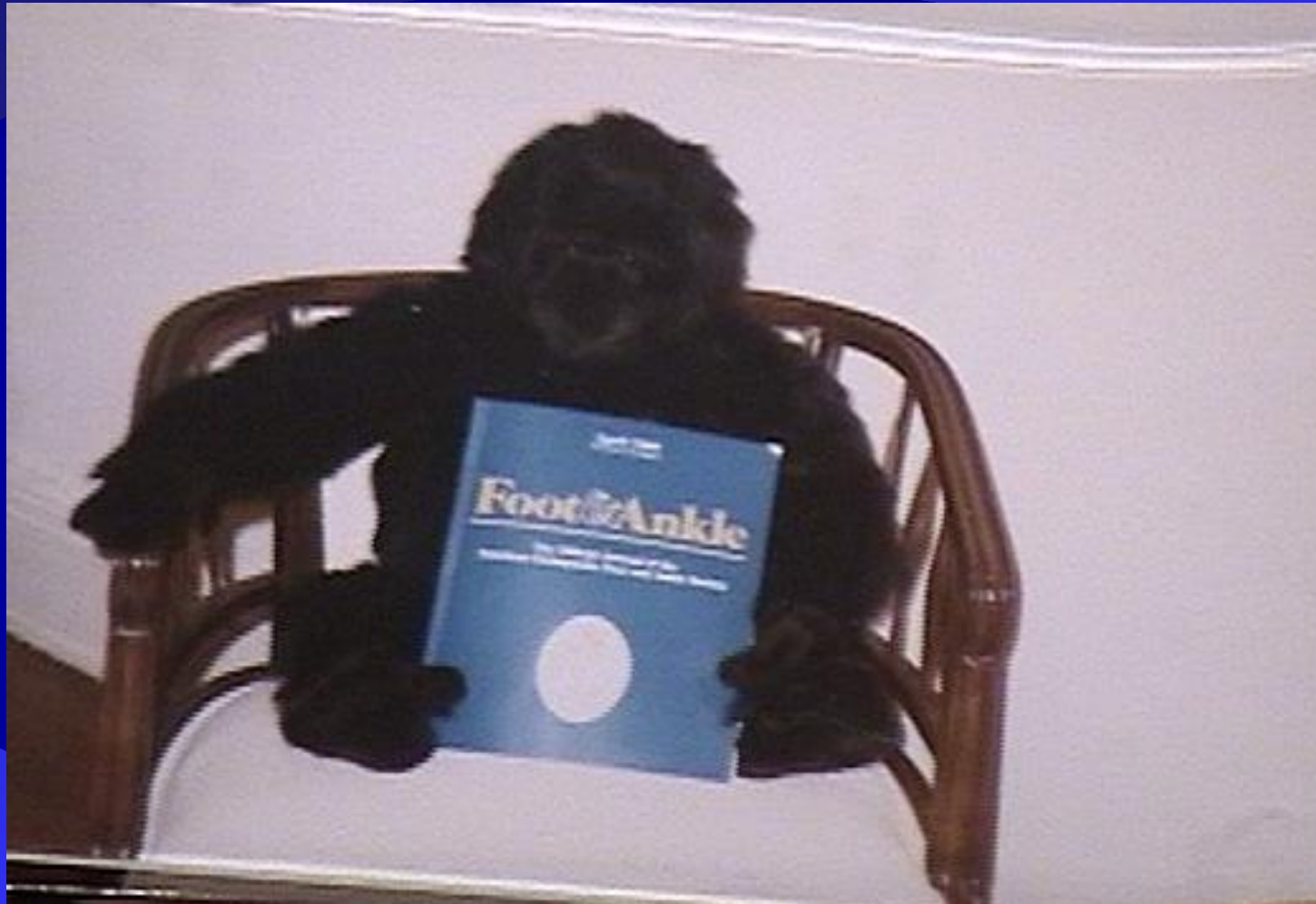




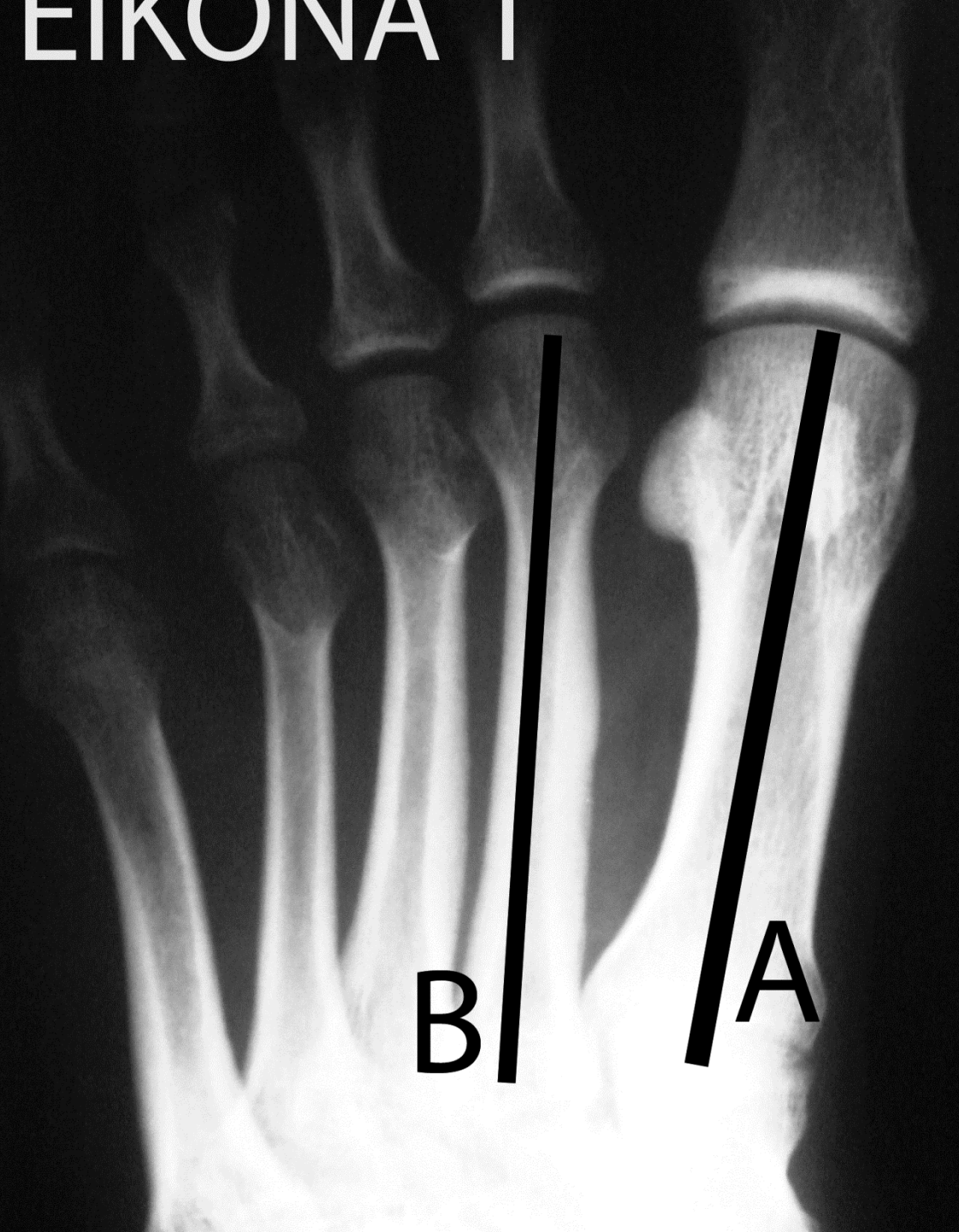
Παραμορφώσεις προσθίου ποδός



Το πρόβλημα? Η «κλασική» γνώση!!!!



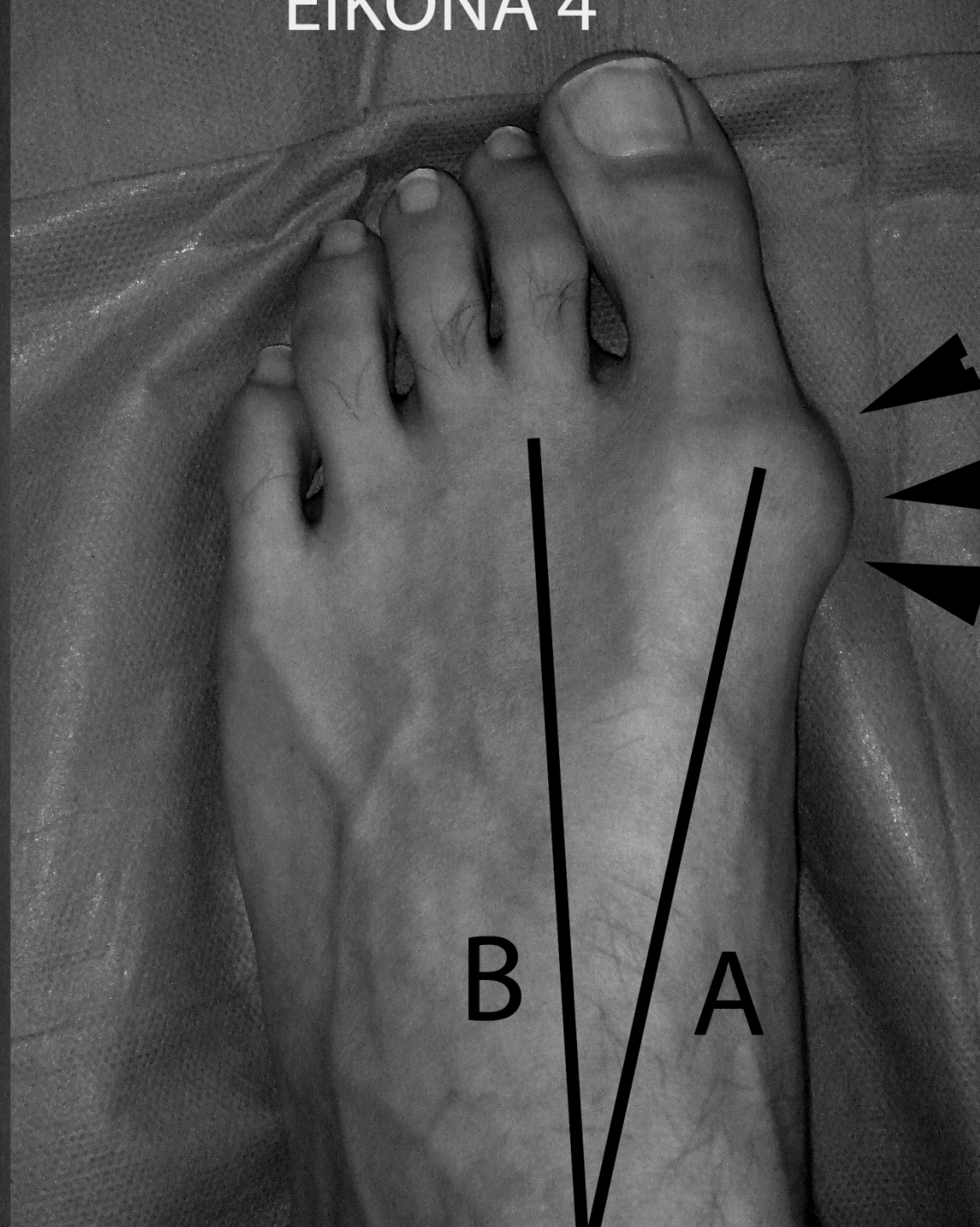
EIKONA 1



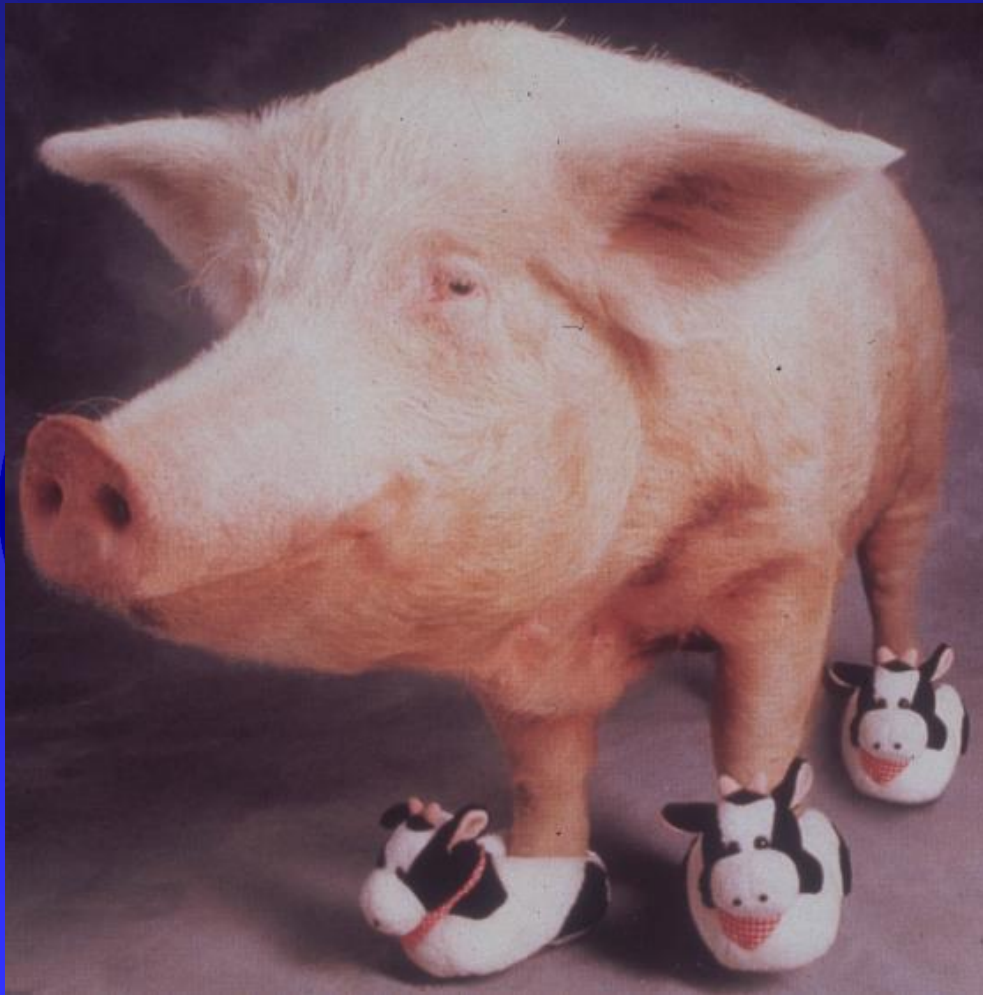
EIKONA 3



EIKONA 4



ΣΥΝΤΗΡΗΤΙΚΗ



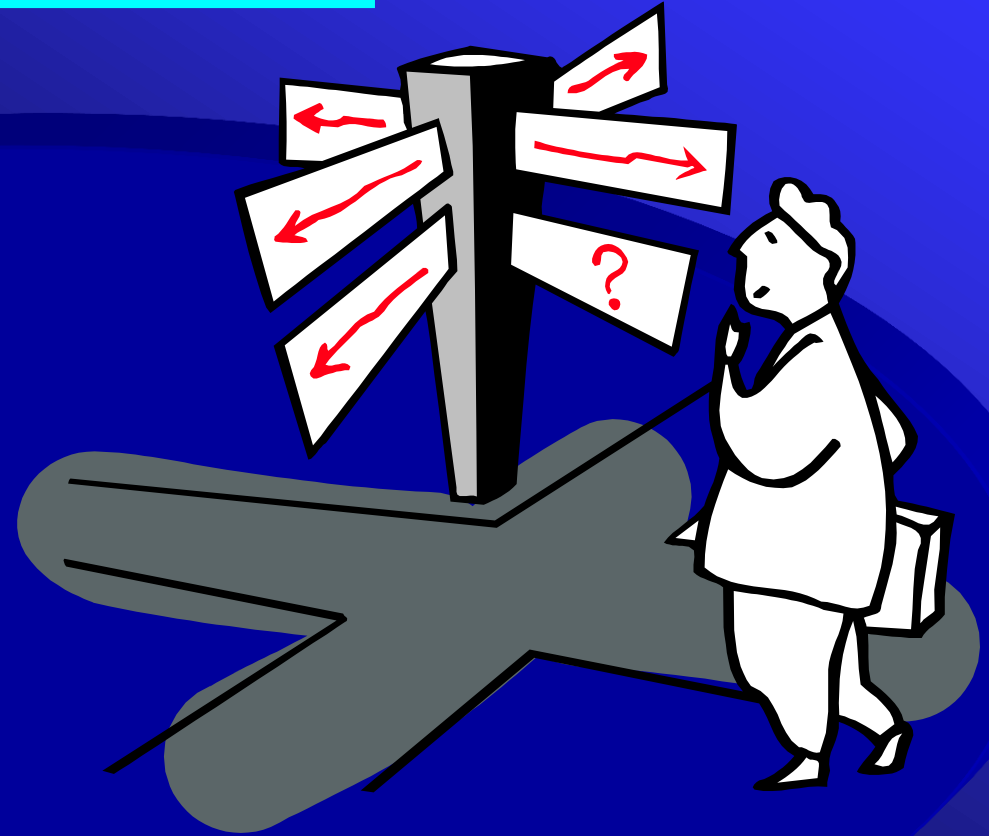
IF THE
SHOE
FITS,
WEAR
IT!



ΧΕΙΡΟΥΡΓΙΚΗ

“...153 surgical procedures have been described for hallux valgus”

*J Verbrugge : Bul
Mem Soc Belge
d'Orthop 1933*



HV 15-30°

IM έως 13-15°

Περιφερική οστεοτομία

HV 30-40°

IM έως 20°

Οστεοτομία βάσης ή διάφυσης +/- Akin
και DSTP

HV >40°

IM >20°

Οστεοτομία βάσης ή διάφυσης +/- Akin
και DSTP (Αρθρόδεση???)

Ηλικία

Μέγεθος παραμόρφωσης

Εναρμογή άρθρωσης

Κινητικότητα 1ης ακτίνας

Παρουσία αρθρίτιδας στην ΜΤΦ

Εμπειρία χειρουργού

Λόγος οφέλους/επιπλοκές



16 14:39



УПТО



08:41 91



16 20:01







12 11:58







Πιστεύεις στην MIS???



Orthop Clin North Am. 2009 Oct;40(4):505-14, ix.

Percutaneous hallux valgus surgery: a prospective multicenter study of 189 cases.

Bauer T, de Lavigne C, Biau D, De Prado M, Isham S, Laffenêtre O.

Source

GRECMIP: Groupe de Recherche en Chirurgie Mini-Invasive du Pied, Sport Medical Center, Department of Orthopedic Surgery, 9 rue Jean Moulin, 33700 Merignac, France. thomas.bauer@apr.aphp.fr

The median hallux valgus angle and **intermetatarsal angle** improved from 28 degrees and **13 degrees preoperatively**, to 14 degrees and **10 degrees** postoperatively, respectively.

Radiographic Results After Percutaneous Distal Metatarsal Osteotomy for Correction of Hallux Valgus Deformity

Anish R. Kadakia, M.D.; Jonathan P. Smerek, M.D.; Mark S. Myerson, M.D.
Baltimore, MD

Table 2: Postoperative complications after percutaneous distal metatarsal osteotomy

Complication	Number of patients (%)
Dorsal malunion	9 (69%)
Recurrent hallux valgus (>15°)	5 (38%)
Symptomatic hardware	4 (31%)
Non-union	1 (8%)
Cellulitis	1 (8%)
Osteonecrosis	1 (8%)
Revision	1 (8%)

We cannot recommend this procedure for correction of hallux valgus given the more reliable available procedures, particularly the distal metatarsal chevron osteotomy and are no longer performing this procedure at our institution...

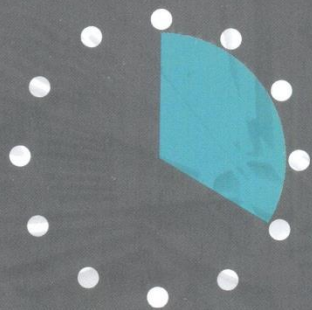
Surgical Treatment of Severe Hallux Valgus: The State of Practice Among Academic Foot and Ankle Surgeons

Stephen J. Pinney, M.D.¹; Kyle R. Song, M.D.²; Loretta B. Chou, M.D.³
Stanford, CA

Table 1: Results

First metatarsal osteotomy (total)	54 (52%)
Ludloff (oblique)	24 (24%)
Proximal crescentic	16 (16%)
Proximal chevron	8 (8%)
Scarf	2 (2%)
Distal chevron	2 (2%)
Other	2 (2%)
First TMT arthrodesis (Lapidus)	24 (24%)
First MTP arthrodesis	26 (26%)
Secondary procedures	
Akin osteotomy	31 (30%)
Second metatarsal osteotomy	
Weil	46 (45%)
Shaft	1 (1%)
Other (ex. PIP resection)	15 (15%)

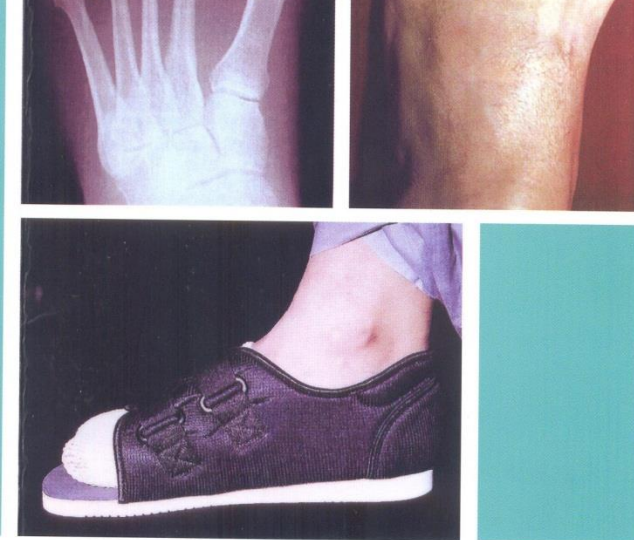
Βήλαισός Μέγας Δάκτυλος (κότσι)



**Διάρκεια επέμβασης
20 λεπτά**

Σήμερα, αυτή η παθολογική κατάσταση του άκρου ποδός μπορεί να διορθωθεί μέσα σε 20 λεπτά εντελώς ανώδυνα χάρη σε μια νέα επαναστατική διαδερμική χειρουργική τεχνική.

Απ' ευθείας μετά τη χειρουργική επέμβαση δίνετε πλήρη φόρτιση στο χειρουργημένο πόδι και επιστρέφετε στο σπίτι σας χωρίς πατερίτσες και χωρίς διαμονή στην Κλινική.



ΠΛΕΟΝΕΚΤΗΜΑΤΑ ΤΗΣ ΔΙΑΔΕΡΜΙΚΗΣ ΔΙΟΡΘΩΤΙΚΗΣ ΟΣΤΕΟΤΟΜΙΑΣ

- Η επέμβαση γίνεται με τοπική αναισθησία (block)
- Επέμβαση day-clinic (δεν απαιτείται εισαγωγή στην Κλινική)
- Τομές μικρότερες από 3 χιλιοστά. Δεν δημιουργούν μετεγχειρητικές ουλές
- Δεν χρησιμοποιούνται υλικά όπως βίδες - καρφίδες και άρα δεν απαιτείται 2η επέμβαση για να αφαιρεθούν
- Δεν τοποθετείται γυψονάρθηκας μετεγχειρητικά
- Άμεση και πλήρης φόρτιση του χειρουργημένου ποδιού μετεγχειρητικά χωρίς να χρειάζονται πατερίτσες
- Ανώδυνη μετεγχειρητική περίοδος



Contents lists available at ScienceDirect

Foot and Ankle Surgery

journal homepage: www.elsevier.com/locate/fas



Editorial

Minimal invasive surgery (MIS) in foot and ankle surgery

results of these techniques should be extensively documented and followed in time. These results should clearly establish the benefit of these techniques for the patient, preferably with prospective randomized studies but we fully recognise that such evidence is lacking for many surgical procedures. Techniques should at least improve and evolve in time and should become very safe and rather simple before they are introduced to the broader population of surgeons and propagated for the treatment of patients in Europe.

Jan Willem Louwerens MD, PhD*
*Foot & Ankle Reconstruction Unit, St. Maartenskliniek,
Nijmegen, The Netherlands*

Victor Valderrabano MD, PhD
Orthopaedic Department, University of Basel, Basel, Switzerland

Ian Winson MB ChB FRCS
Avon Orthopaedic Centre, Bristol, GB, UK

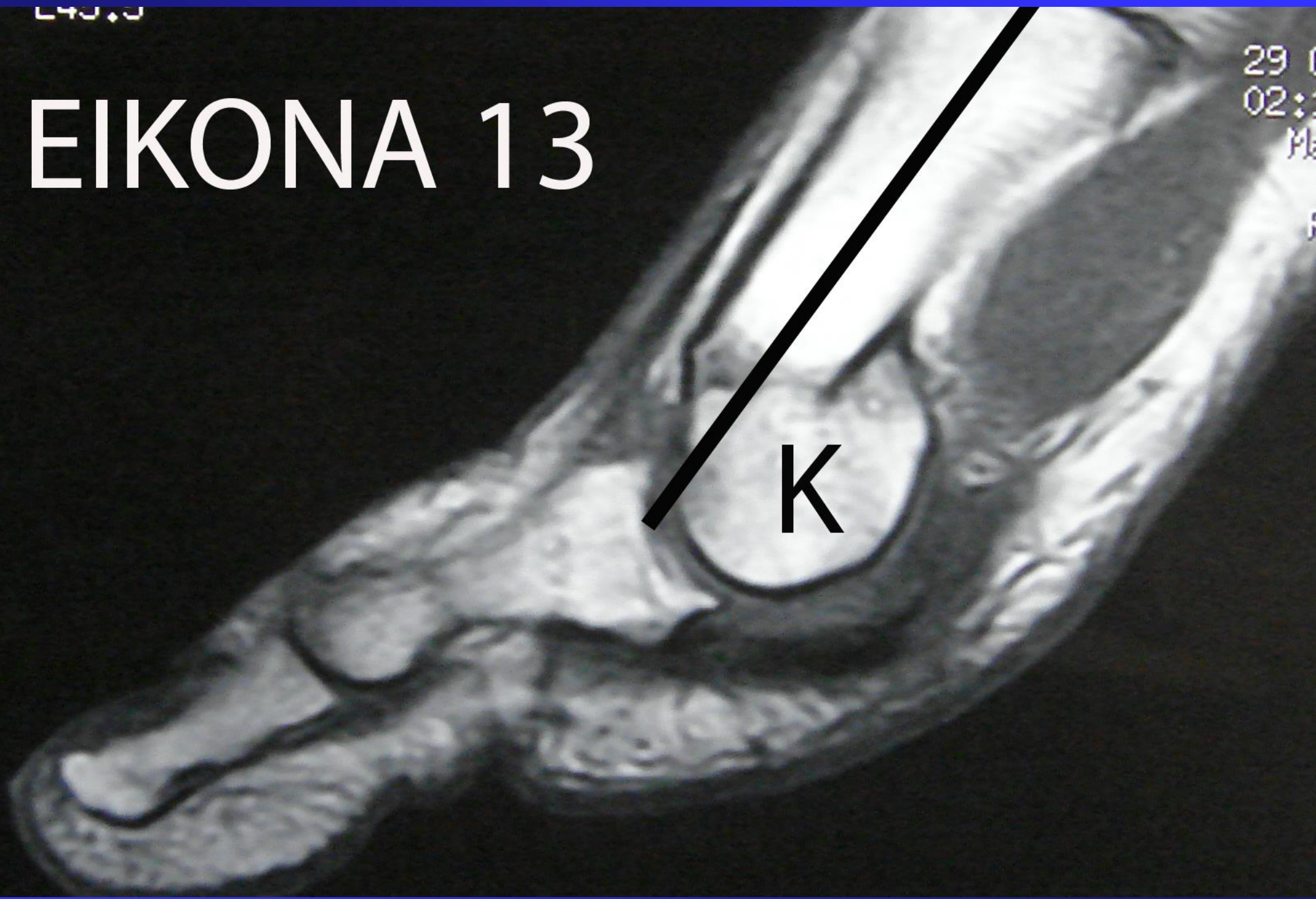


g L43.3

EIKONA 13

2

29 0
02:3
Ma



K



EIKONA 14



EIKONA 15





Παθολογία μικρών δακτύλων και μεταρσαλγία

.....there are so many ways to treat the lesser toes.

I hate all of them !!!!!

Nothing is that predictable.....

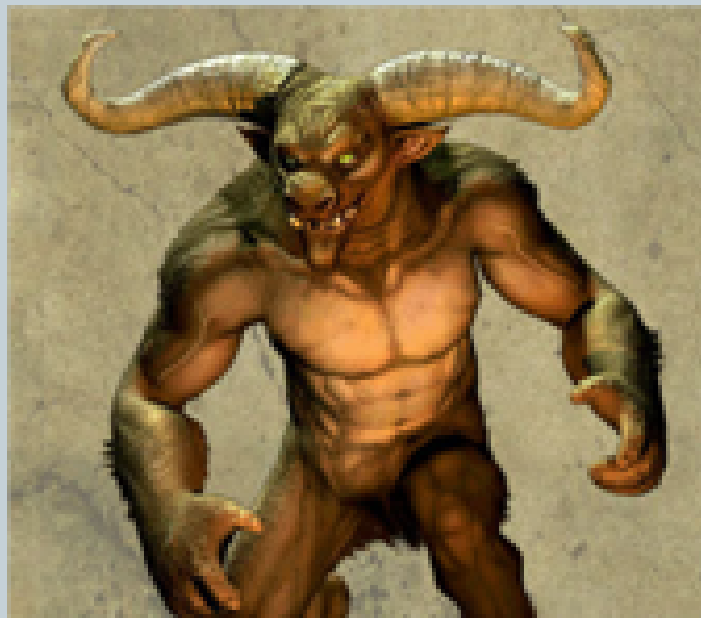
Mark S Myerson

ΜΕΤΑΤΑΡΣΑΛΓΙΑ

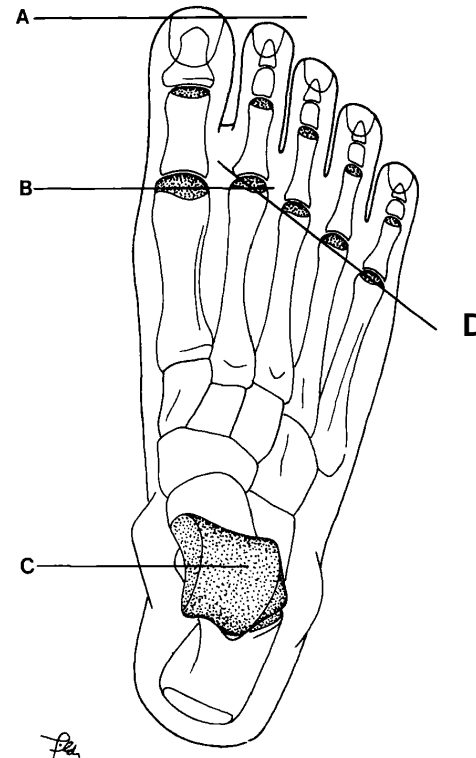
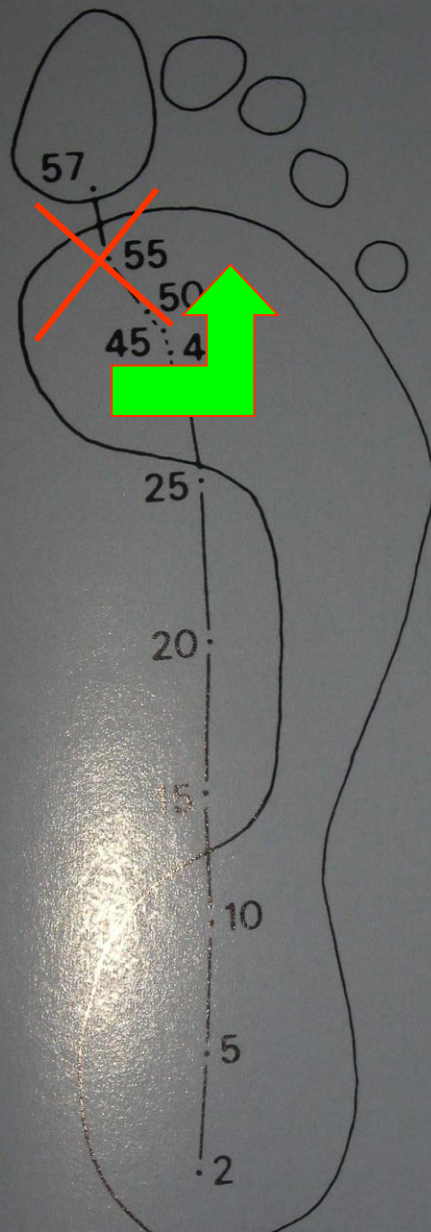
Σύμπτωμα και όχι παθολογία!!!!

“Pain arising from the metatarsal heads, MTP joints and surrounding soft tissues due to a wide spectrum of clinical entities”.

Πτώση Κεφαλών Μεταταρσίων????

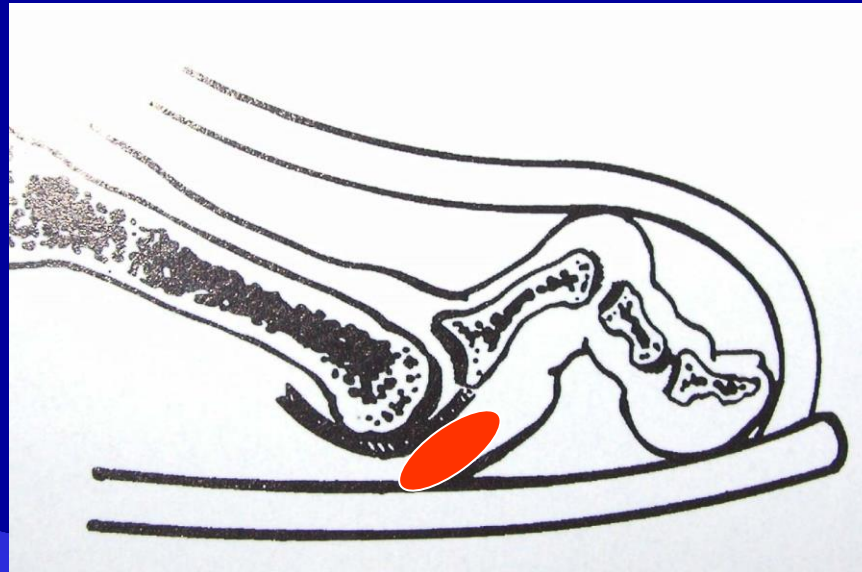
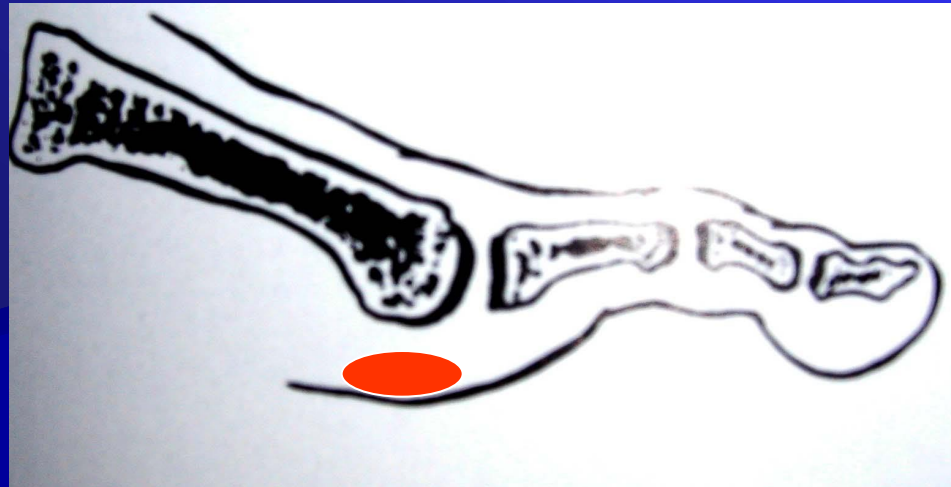


- Αδιευκρίνιστη οντότητα της Ελληνικής Ορθοπαιδικής μυθολογίας (βλ. Μινώταυρος)
- Δεν απαντάται στην Αγγλική βιβλιογραφία
- Περιγράφει μεταταρσαλγία που δεν έχει (ακόμα) αιτιολογηθεί



- A. Κορυφή μεγάλου δακτύλου
- B. Εγκάρσιο επίπεδο κοινού άξονα περιστροφής των μεταταρσοφαλαγγικών αρθρώσεων, στην ραχιαία έκταση.
- C. Επίπεδο ποδοκνημικής άρθρωσης
- D. Οβελιαίο επίπεδο κοινού άξονα περιστροφής των μεταταρσοφαλαγγικών αρθρώσεων, στην ραχιαία έκταση.

Εικόνα 1. (Από Finn BM, Clin Orthop Rel Res, 1979)

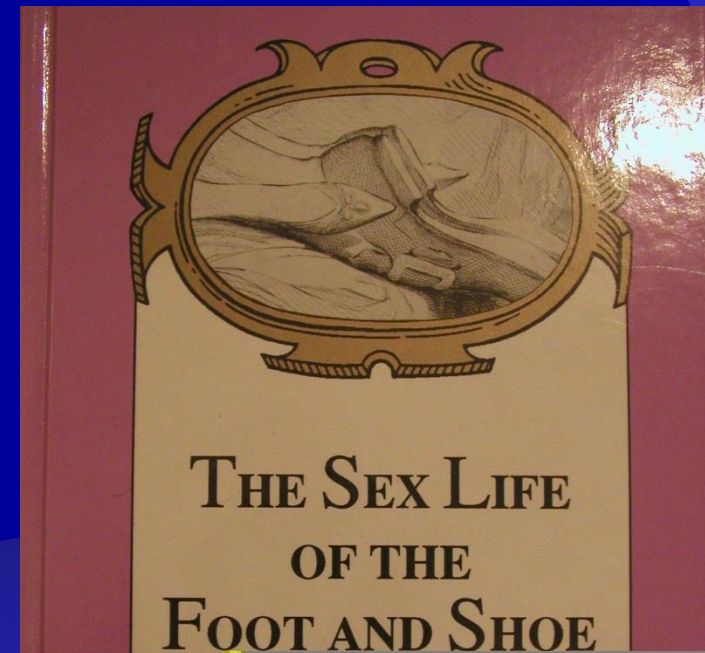


Αιτιολογία

....η ακριβής γνώση του εχθρού είναι το καλύτερο όπλο....

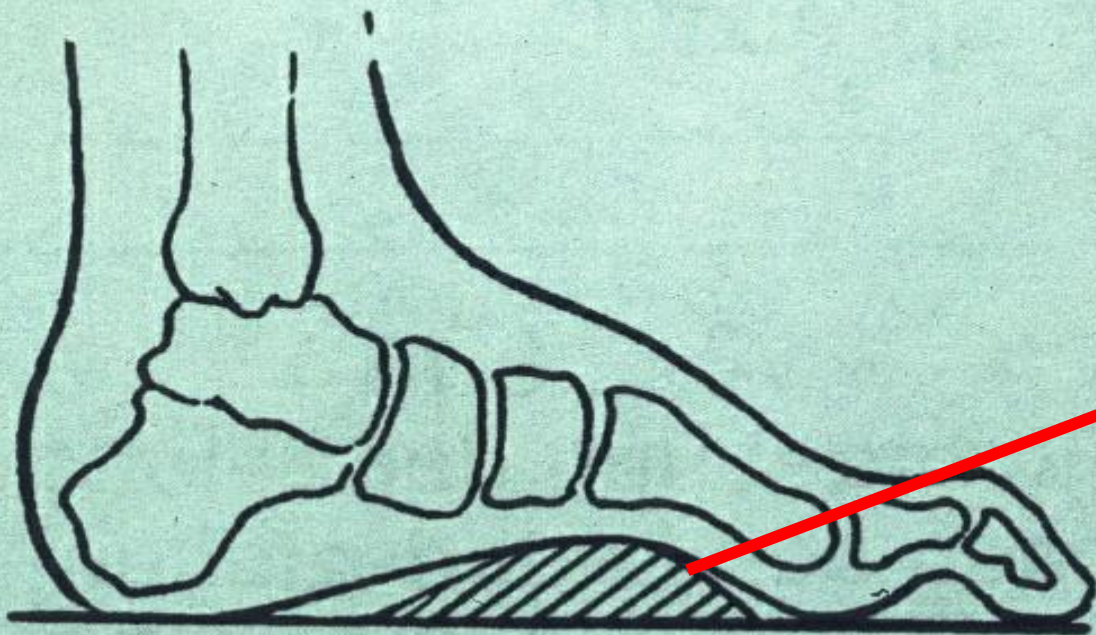
- *Εκφυλισμός λιπώδους σώματος*
- *Παθολογία κεφαλών μεταταρσίων*
- *Παθολογία των ΜΤΦ*
- *Ανατομικές ανωμαλίες*
- *Μεσοδακτύλιος νευραλγία*
- *Ιατρογενείς βλάβες*
- *Μετατραυματικά επακόλουθα*
- *Συστηματικά νοσήματα*
- *Λειτουργική ανεπάρκεια 1^{ης} ακτίνας*

Μην ξεχνάτε την κακή υπόδηση.....



Εκφύλιση λιπώδους σώματος

Θεραπεία ΠΑΝΤΑ συντηρητική



Ανεπάρκεια 1^{ης} ακτίνας

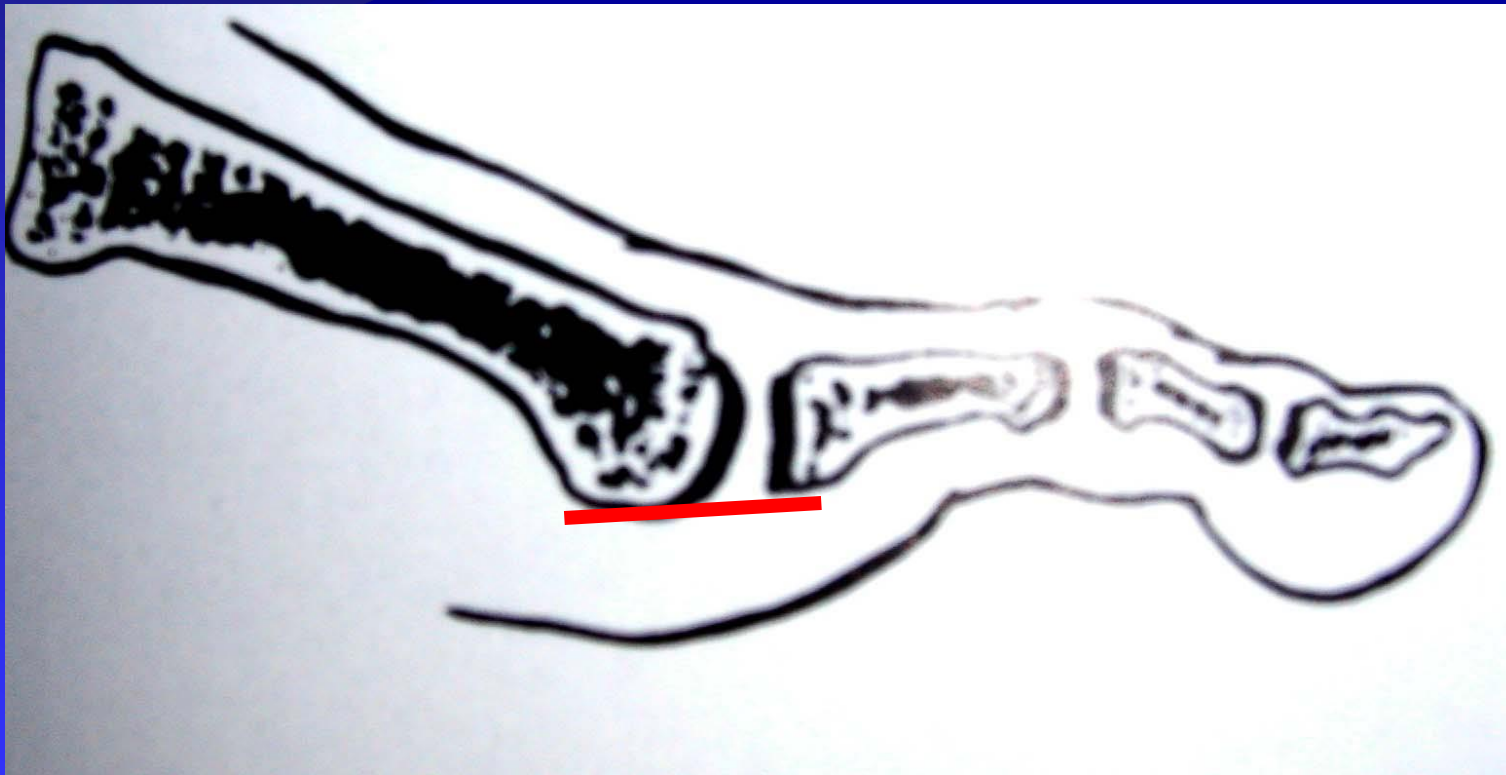
Βλαισός μέγας δάκτυλος





Παθολογία των ΜΤΦ (Αστάθεια της ΜΤΦ)

Εκφυλιστική παθολογία του πελματιαίου πετάλου



GRADE I: Υμενίτιδα-αδιόρατη παραμόρφωση

Επώδυνη άρθρωση

Διογκωμένη

Θετικό drawer test

Πόνος στην ήπια παθητική υπερέκταση

Πόνος στην τρίτη φάση βάρδισης



Η διάγνωση με μαθηματική ακρίβεια χάνεται για πολλούς μήνες

GRADE II: Ραχιαία ή ραχιαία έσω απόκλιση (Cross over)

Απόκλιση κυρίως ορατή στο Push up ή load stimulation test
Προσοχή στις ακτινογραφίες

10 8:28AM



10 8:29AM



Load stimulation test



GRADE III: Ραχιαίο ή ραχιαίο έσω υπεξάρθρημα (Cross over)



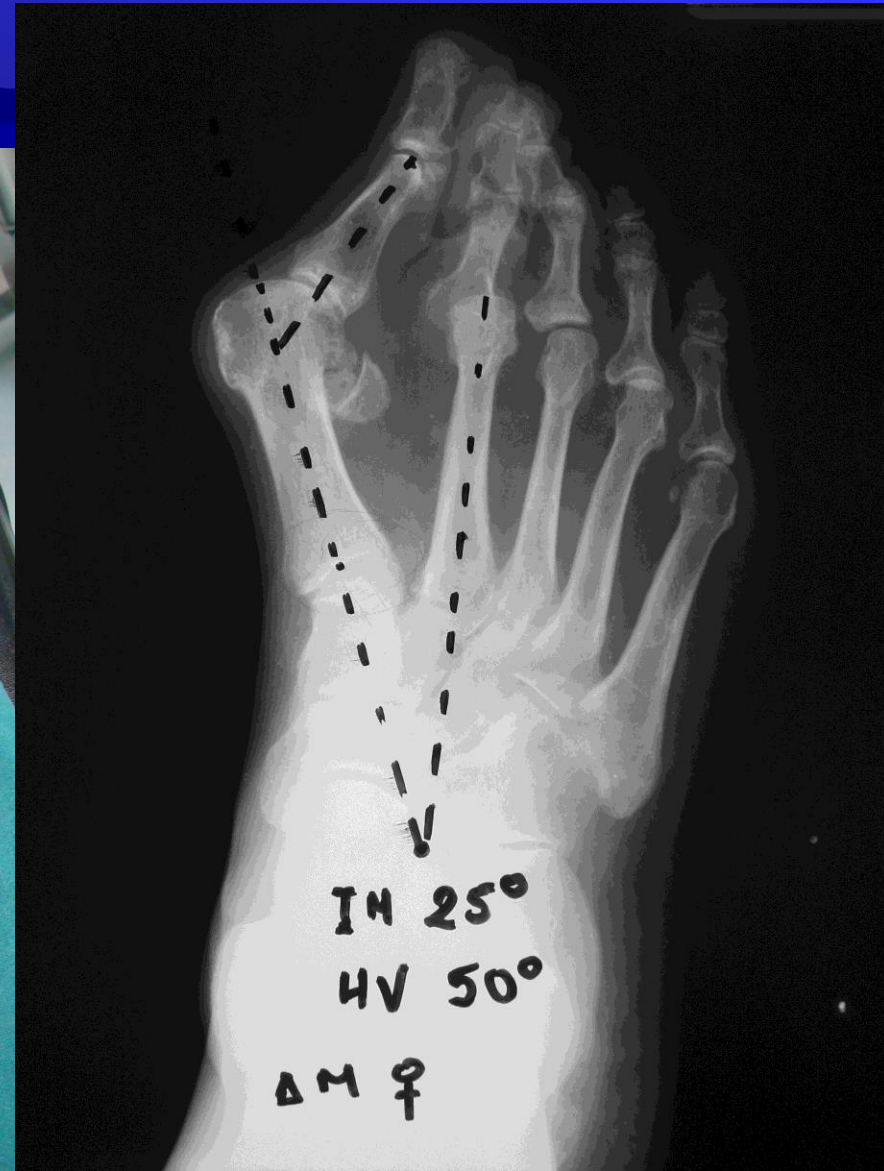


23 7:55AM



23 7:57AM

GRADE IV: Εξάρθρωμα



ΘΕΡΑΠΕΙΑ

Συντηρητική

Grade II-IV: Malpractice???

Grade I:

Σκληρή άκαμπτη σόλα

Σόλα Rocker

Budin splint

Έγχυση κορτικοειδούς



ΧΕΙΡΟΥΡΓΙΚΗ

Διατομή ραχιαίου θυλάκου
EDL & EDB- Επιμήκυνση 'Z'
Διατομή πλαγίων και αυτοχθόνων
Αποκόλληση του plantar plate





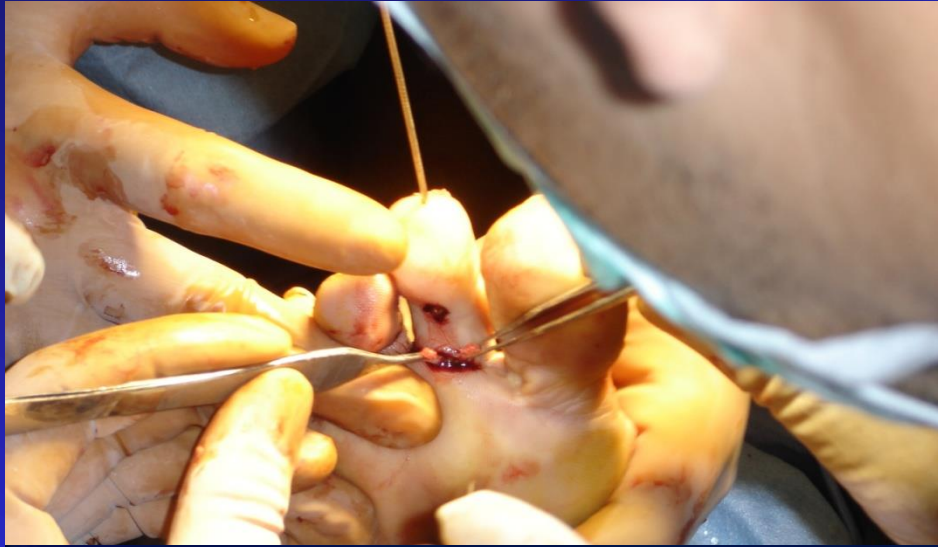


24.03.2005



24.03.2005

Τενοντόδεση ή τενοντομεταφορά?????





23 7:55AM



23 7:57AM



1 year
post op
O.R. ♀
62

16 11:40



16 11:40









20 10:43

3 18:02



ANATOMIKEΣ ANΩΜΑΛΙΕΣ

Διαταραχή μήκους 2^{ου} μεταταρσίου

Διαταραχή μήκους 1^{ου} μεταταρσίου (Morton's Foot)

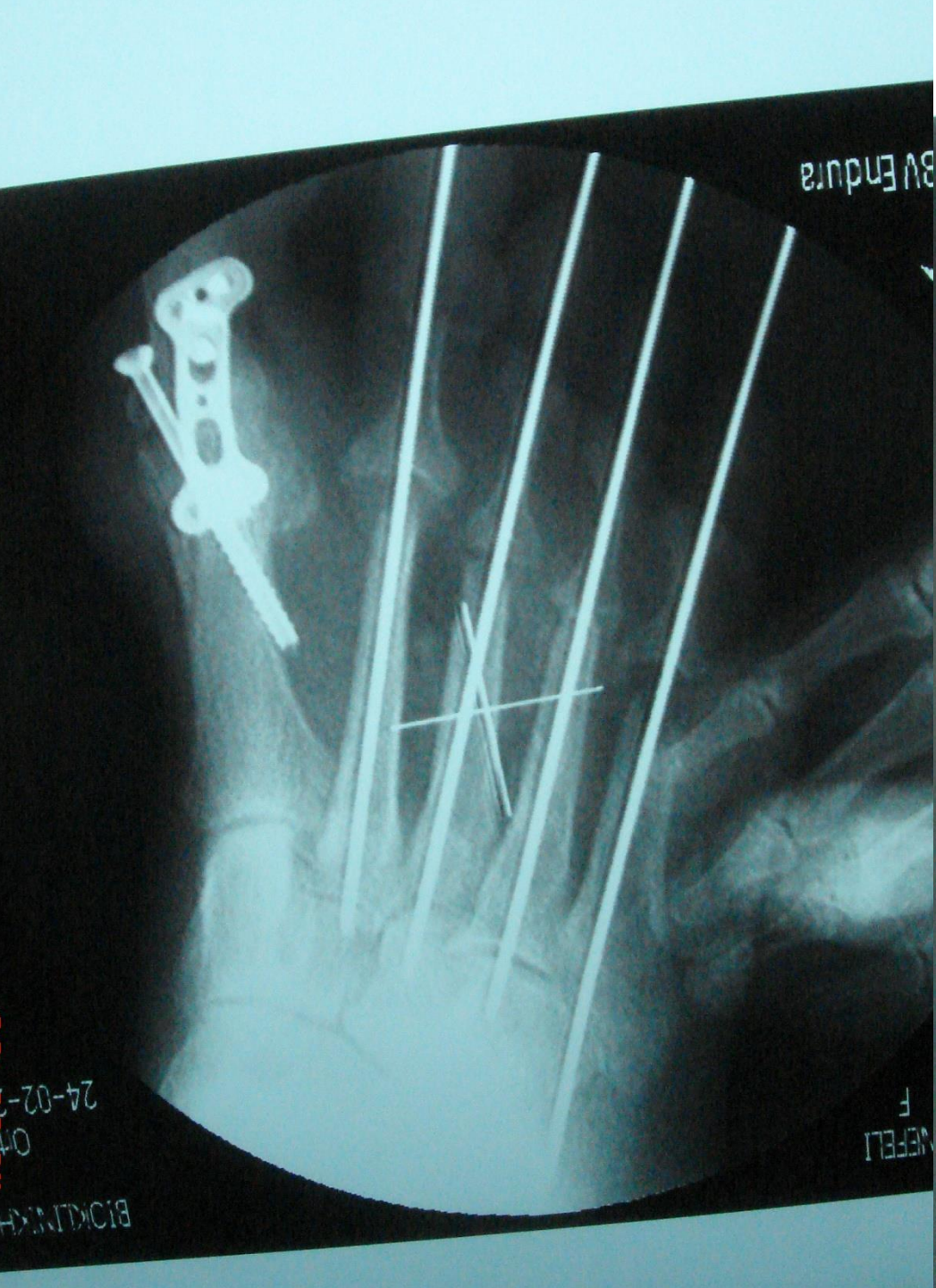
Ευμεγέθους έξω κόνδυλος κεφαλής 2^{ου} μεταταρσίου

Πελματιαία κάμψη 2^{ου}-3^{ου} μεταταρσίων (BRT osteotomy)



ΣΥΣΤΗΜΑΤΙΚΑ ΝΟΣΗΜΑΤΑ











12 13:05

04:01 6





Μεσοδακτύλιος νευραλγία



Thomas Morton's Disease: A Nerve Entrapment Syndrome

A New Surgical Technique

G. GAUTHIER

Number 142
July-August 1979

During the last part of the stance phase of gait, the nerve can be squeezed between the plantar soft tissue and the anterior edge of the plantar fascia. This occurs at each step and thus becomes repetitive trauma.

subsequent development of a neuroma. Instead of performing a resection of the neuroma, with its attendant risk of loss of sensation or of normal sweat production, we prefer to release the intermetatarsal ligament. There is also no possibility that a neuroma will develop from the proximal part of the divided nerve. With this simple method, we obtained an 83% incidence of good as well as permanent results.

Morton's Toe

Clinical, Light and Electron Microscopic Investigations in 133 Cases

G. LASSMANN

Number 142
July-August 1979

(1) sclerosis and edema of the endoneurium; (2) thickening and hyalinization of the walls of the endoneural vessels caused by multiple layers of basement membranes; (3) thickening of the perineurium; (4) deposition of an amorphous eosinophilic material built up by filaments of tubular structure; (5) demyelination and degeneration of the nerve fibers without signs of Wallerian degeneration and local initial hyperplasia of unmyelinated nerves followed by degeneration.

Comparing histograms of the myelinated and unmyelinated fibers of our material with the alterations in the carpal tunnel or ulnar nerve compression syndromes^{1, 12, 24, 25, 31, 34, 48} it is tempting to classify Morton's metatarsalgia under the group of entrapment neuropathies. This view is also supported by the clinical results of Gauthier and Dutertre.¹⁴ Nevertheless, the

Interdigital nerve compression syndrome



FOOT & ANKLE INTERNATIONAL

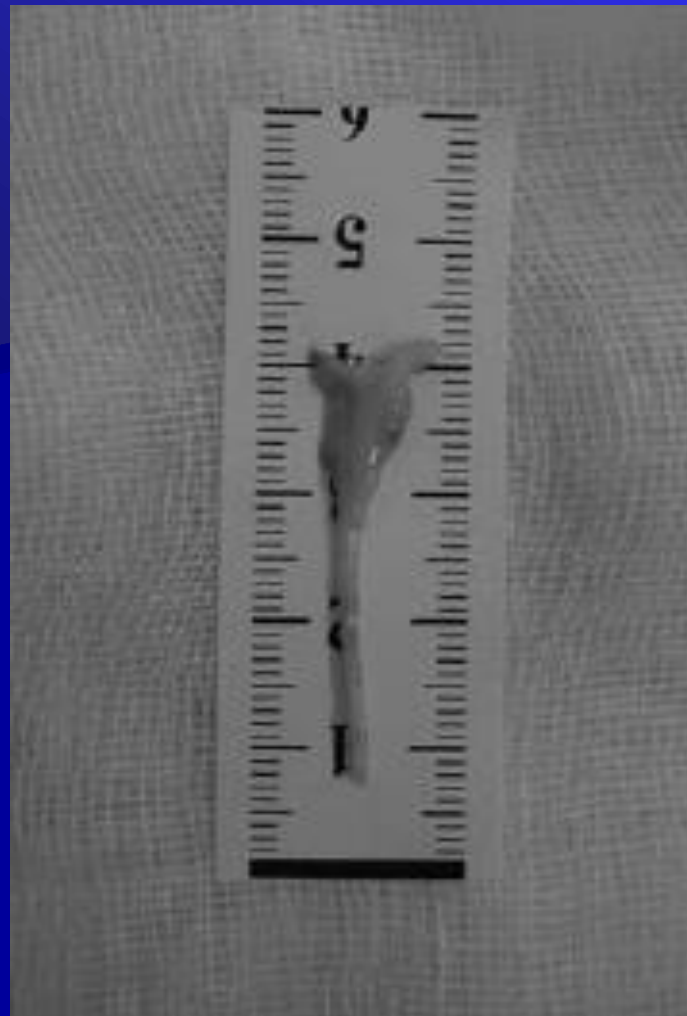
Copyright © 2007 by the American Orthopaedic Foot & Ankle Society, Inc.

DOI: 10.3113/FAI.2007.1007

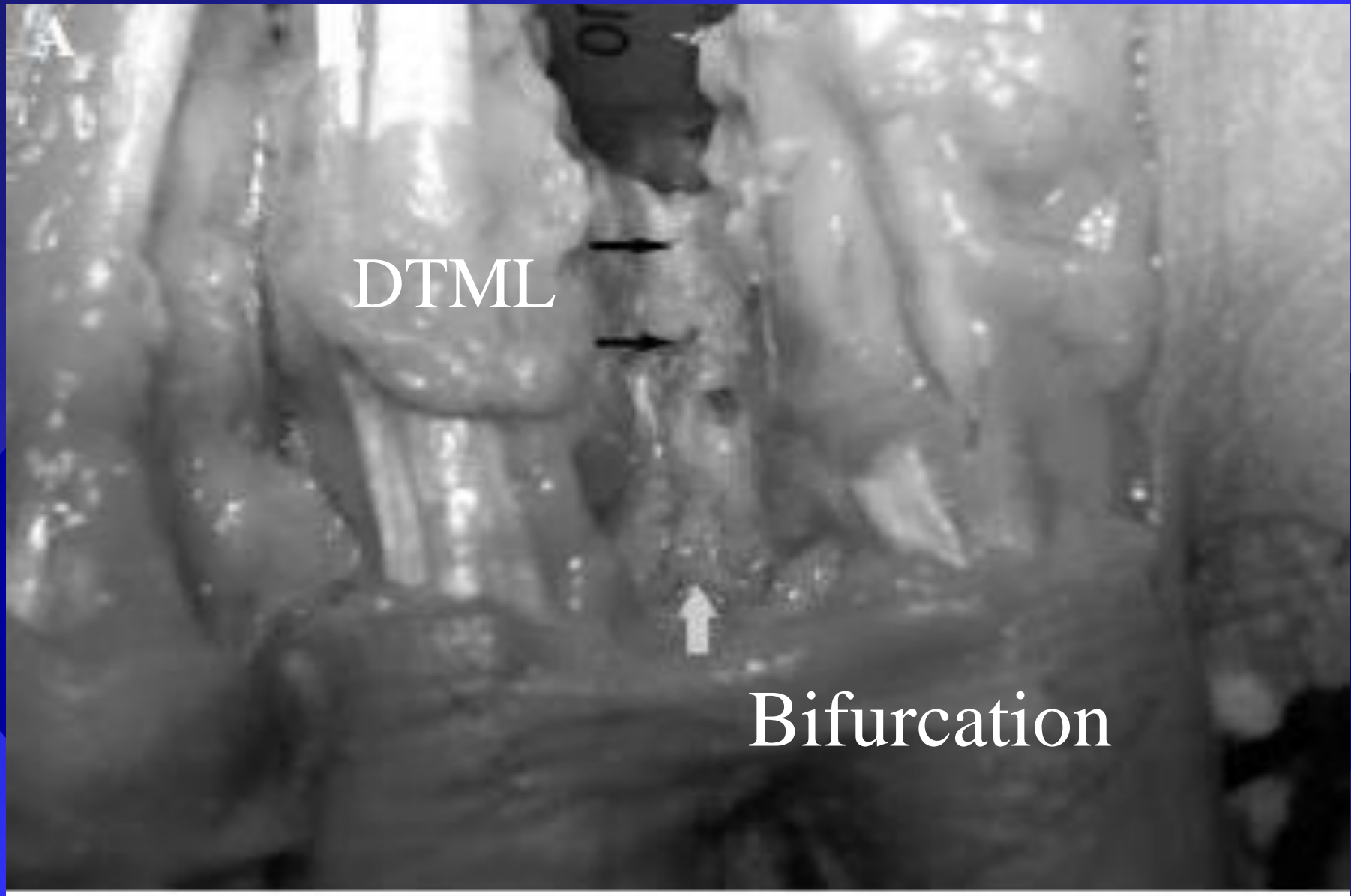
An Anatomical Study of Morton's Interdigital Neuroma: The Relationship Between the Occurring Site and the Deep Transverse Metatarsal Ligament (DTML)

J-Young Kim, M.D.; Jae Hyuck Choi, M.D.; Jungmin Park, M.D.; Joonho Wang, M.D.; Inmook Lee, M.D.

Seoul, South Korea



the distal half of metatarsal head. The mean length of the neuromas was 7.5 (6 to 11) mm. Six neuromas were located



DTML

Bifurcation

checked. The distance was measured at two positions during walking in both the mid-stance and the heel-off positions: at 60 degrees dorsiflexion of the metatarsophalangeal (MTP) joint and 15 degrees dorsiflexion of the ankle. The foot was

mm and 10.6 mm, respectively. The mean distances of the second and third interdigital nerves from the bifurcation of the common digital nerve to the anterior margin of the DTML were 16.7 mm and 15.1 mm at the mid-stance position and 15.9 mm and 14.6 mm at the heel-off position, respectively.

the distal half of metatarsal head. The mean length of the neuromas was 7.5 (6 to 11) mm. Six neuromas were located

heads and the MTP joint during walking. Our results indicate that Morton interdigital neuroma does not occur under or at the DTML, but instead at the level of the MTP joint, which is located more proximally. Because there appears to be no pulling effect against the DTML during walking, the commonly-used tunnel compression theory should be rethought.

**Μα.... Έχω αφαιρέσει ένα σωρό νεύρα
Και η βιοψία ήταν θετική για νεύρωμα!!**



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Morton's Intermetatarsal Neuroma: Morphology and Histological Substrate

Morscher E*, Ulrich J**, Dick W*

From the Orthopaedic Department and the Institute of Pathology** of the University of Basel*

the cause of the patient's pain. Our study demonstrates histological pathologies in 25 nerves excised at autopsies of patients not suffering from metatarsalgia, which were identical to those of 23 nerves excised because of metatarsalgia. Therefore, these histological changes are probably unrelated to the patients' pain.

Since histomorphological findings in intermetatarsal neuroma (so far accepted as the gold standard for confirmation of that diagnosis) were the same as findings in autopsied (normal) specimens, the value of postoperative histological examination is questioned. It merely proved that the nerve has been resected.

From these results it must be concluded that diagnostic MRIs or ultrasonography, are unnecessary for decision-making about operative treatment and are not superior to exploratory local anaesthesia.



FOOT & ANKLE INTERNATIONAL

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DOI: 10.3113/FAL.2008.0574

Long-Term Evaluation of Interdigital Neuroma Treated by Surgical Excision

John W. Womack, MD; David R. Richardson, MD; G. Andrew Murphy, MD; E. Greer Richardson, MD; Susan N. Ishikawa, MD

Memphis, TN

Table 1: Interdigital neuroma clinical evaluation score

Parameter	Score
Pain	
None	20
Mild	10
Severe	0
Maximal walking distance	
Without limitation (>6 blocks)	20
Some limitation (2–6 blocks)	10
Severe limitation (<6 blocks)	0
Sensitivity	
Normal	20
Numbness	10
Dysestheisa	0
Footwear requirement	
Fashionable conventional shoes	20
Comfort shoes or shoe insert	10
Difficulty with any shoes	0

From Giannini, S; Bacchini, P; Cecarelli, F; Vannini, F:
Interdigital neuroma: clinical examination and
histopathologic results in 63 cases treated with excision,
Foot Ankle Int. 25:79, 2004.

patients contacted, 120 (52%) returned
ys. The average Giannini neuroma score
was 53: 61 feet (51%) had good or excellent results, 12 (10%)
had fair results, and 48 (40%) had poor results. The average
finding may be that outcomes of neuroma excision do not appear
to be as successful at long-term followup as previously reported



Treatment of recurrence of symptoms after excision of an interdigital neuroma

A RETROSPECTIVE REVIEW

E. D. Stamatis, M. S. Myerson

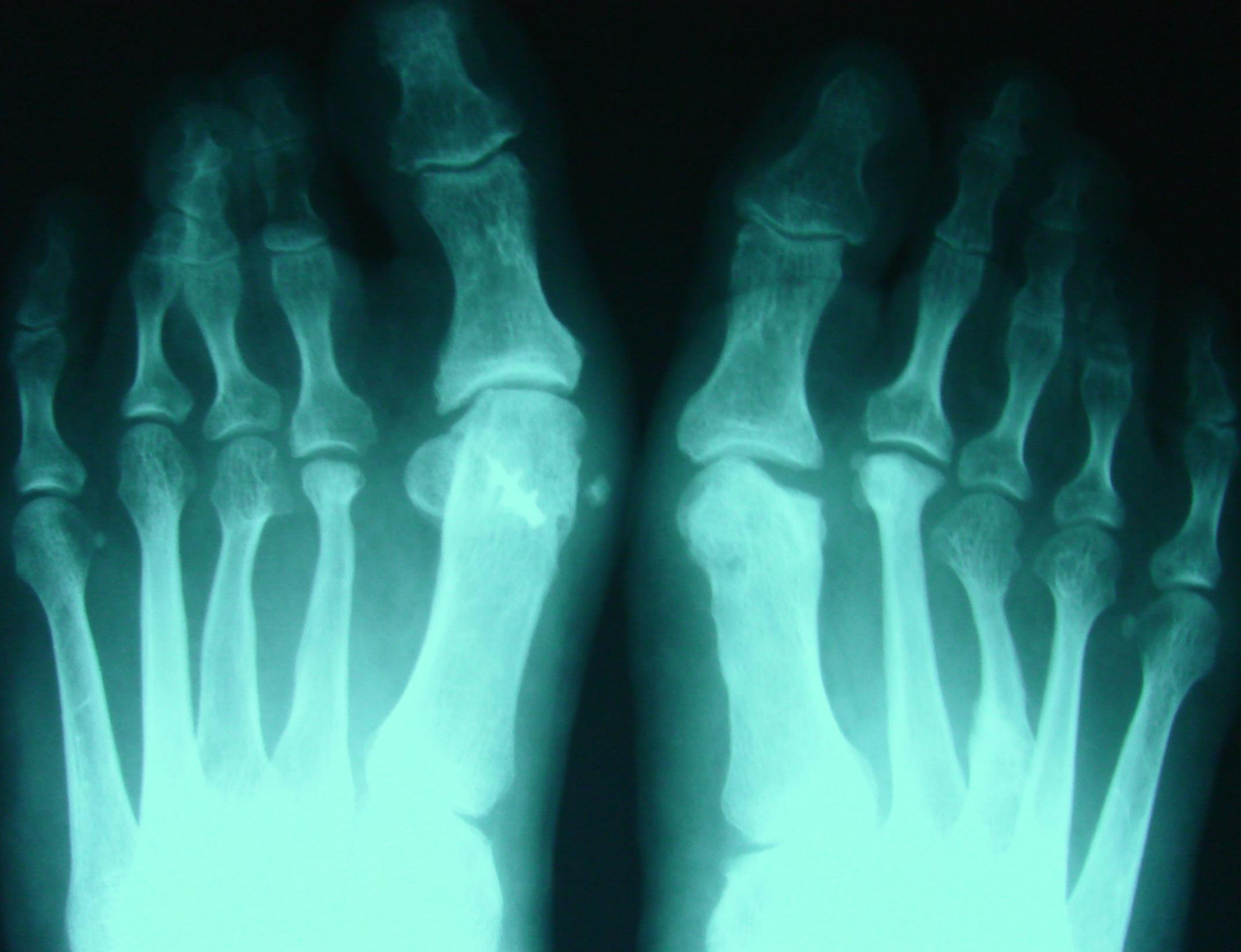
From the Union Memorial Hospital, Baltimore, USA

ΙΑΤΡΟΓΕΝΕΙΣ ΒΛΑΒΕΣ





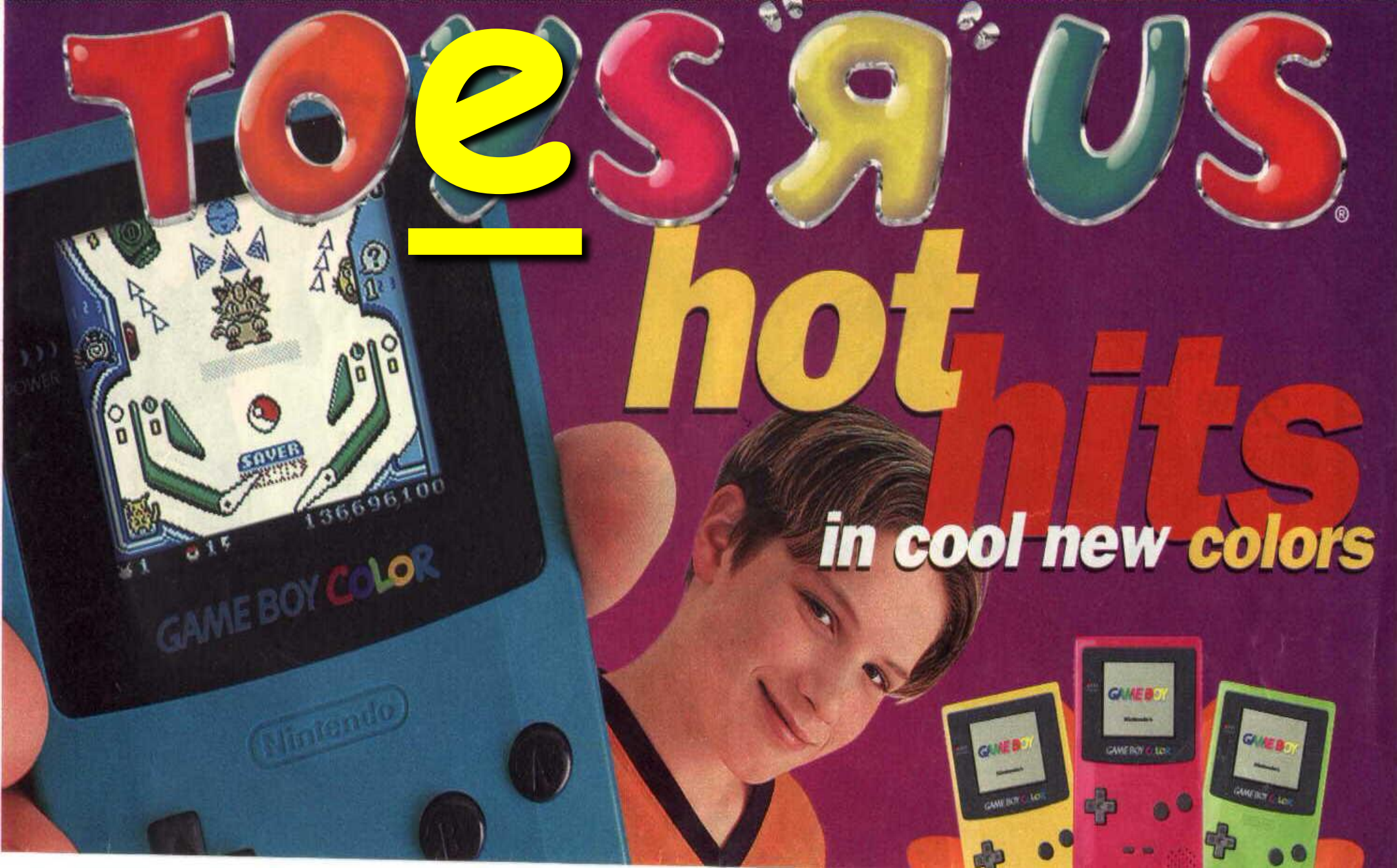






24 4:35PM





TOES

e

hot

hits

in cool new colors

GAME BOY COLOR

Nintendo

GAME BOY
GAME BOY COLOR

GAME BOY
GAME BOY COLOR

GAME BOY
GAME BOY COLOR







Reconstruction of the rheumatoid wrist should be the first consideration when the patient with rheumatoid arthritis presents for hand evaluation, although the opinions of the patient should be taken into account. A



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Current Concepts in the Management of the Rheumatoid Hand

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deformity. If synovitis at the PIP joint persists for over 3 months despite maximal medical management, synovectomy should be performed to avoid stretching of the support ligaments and the central tendon and to prevent articular destruction by the invasive synovial tissue.



