

28_11-2014



lapidus versus osteotomía de la base



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Prof. Asociado de la Universidad del País Vasco
Hospital Universitario Basurto
Bilbao



PLATERO Y YO

JUAN RAMON JIMENEZ



EDITORIAL JUVENTUD

LAPIDUS Y YO

IÑAKI MEDIAVILLA



EDITORIAL JUVENTUD

siglo XX





hipermovilidad en la primera cuneomtt



Clinical, quantitative assessment of first tarsometatarsal mobility in the sagittal plane and its relation to hallux valgus deformity.

Klaue, K.; Hansen, S. T.; and Masquelet, A. C.
Foot and Ankle Internat., 15: 9-13, 1994

hipermovilidad en la primera cuneomtt

3 - 5 %

Surgery of the foot and ankle. Vol. 1.

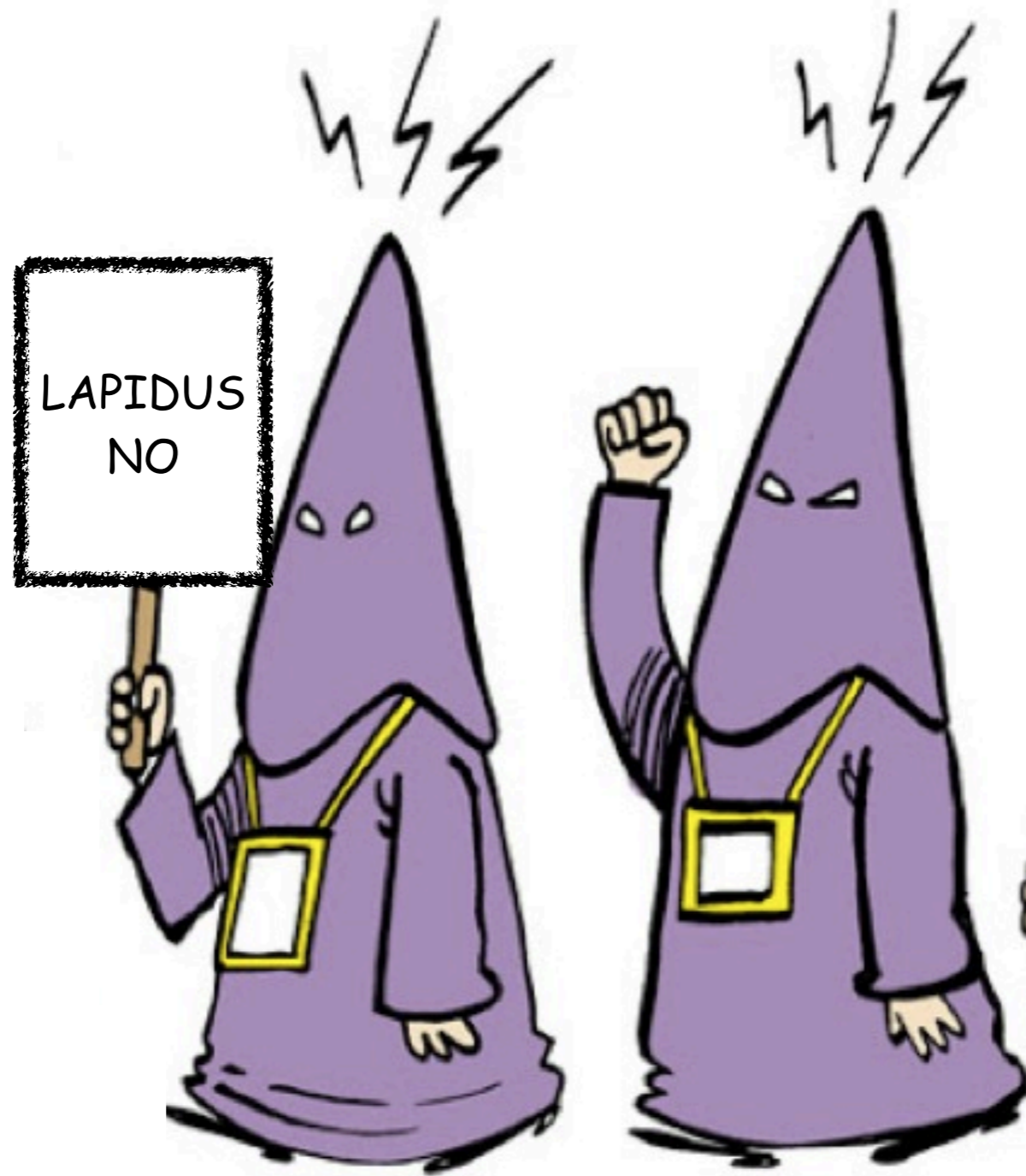
Mann RA, Coughlin MJ. Adult hallux valgus
Seventh ed. St. Louis: Mosby Inc., 1999:150-269.

“long recovery period”



“the largest concern is
the risk of nonunion”





After correction of HV deformities with a DSTR and a proximal crescentic osteotomy...

first ray mobility in cadaver specimens was significantly reduced

Hallux valgus and first ray mobility: a cadaveric study

Coughlin MJ. Jones CP. Viladot R. Golano P. Grebing BR. Kennedy MJ.
Shurnas PS. Alvarez F.
Foot & Ankle International. 25(8):537-44, 2004 Aug.

siglo XXI





¿Cuándo fue la ÚLTIMA
vez que hiciste algo
por PRIMERA vez?

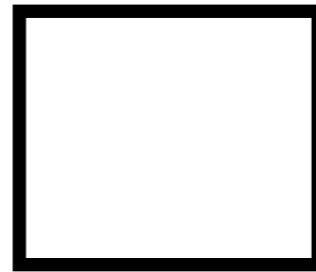
2009



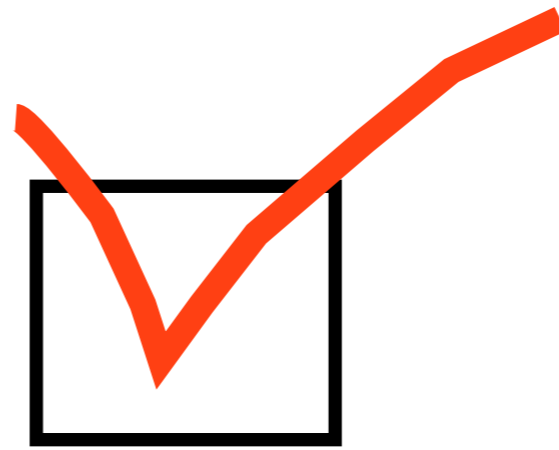
2009



Lapidus



Lapidus

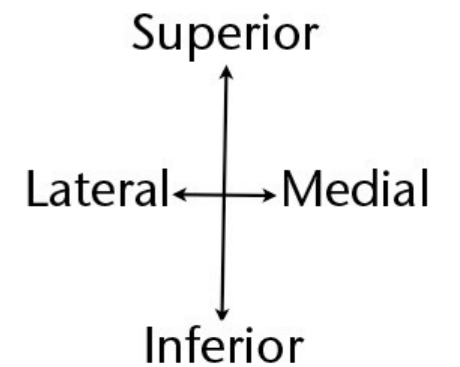


42 pies en 23 especimenes

Unifact



tipo 1



The first tarsometatarsal joint and its association with hallux valgus

L. W, Mason, H. Tanaka

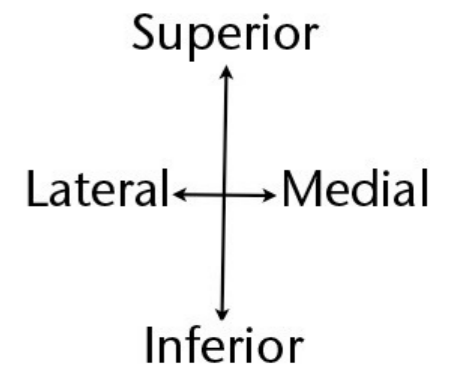
Bone Joint Res. Jun 2012; 1(6): 99–103.

42 pies en 23 especimenes

Bifacet



tipo 2



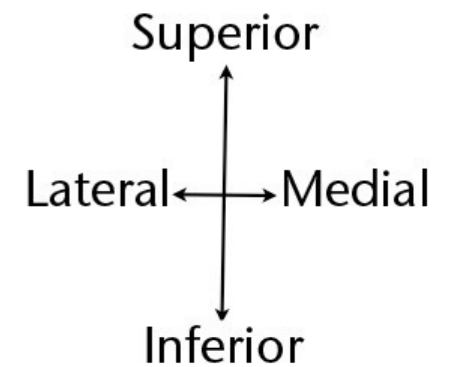
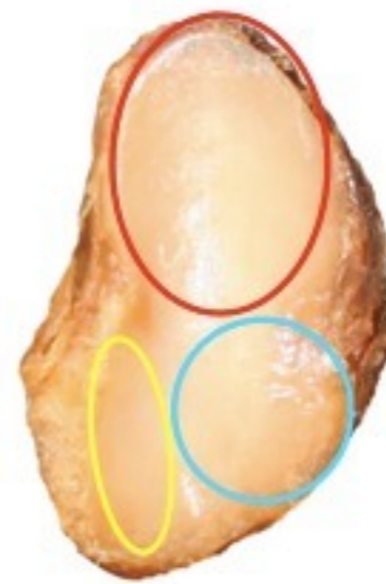
The first tarsometatarsal joint and its association with hallux valgus

L. W, Mason, H. Tanaka

Bone Joint Res. Jun 2012; 1(6): 99–103.

42 pies en 23 especimenes

Trifacet

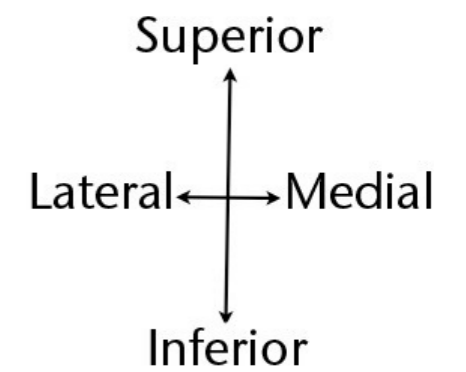
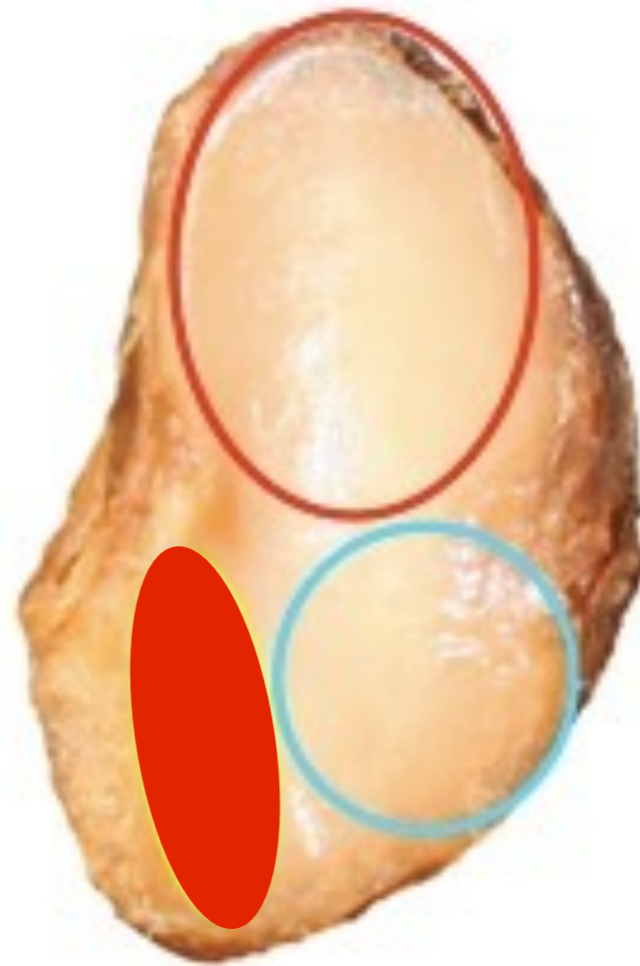


tipo 3

The first tarsometatarsal joint and its association with hallux valgus

L. W, Mason, H. Tanaka

Bone Joint Res. Jun 2012; 1(6): 99–103.



tipo 3

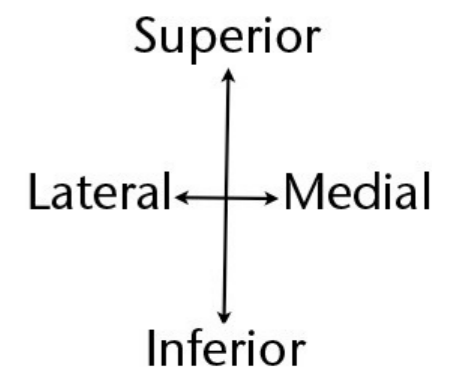
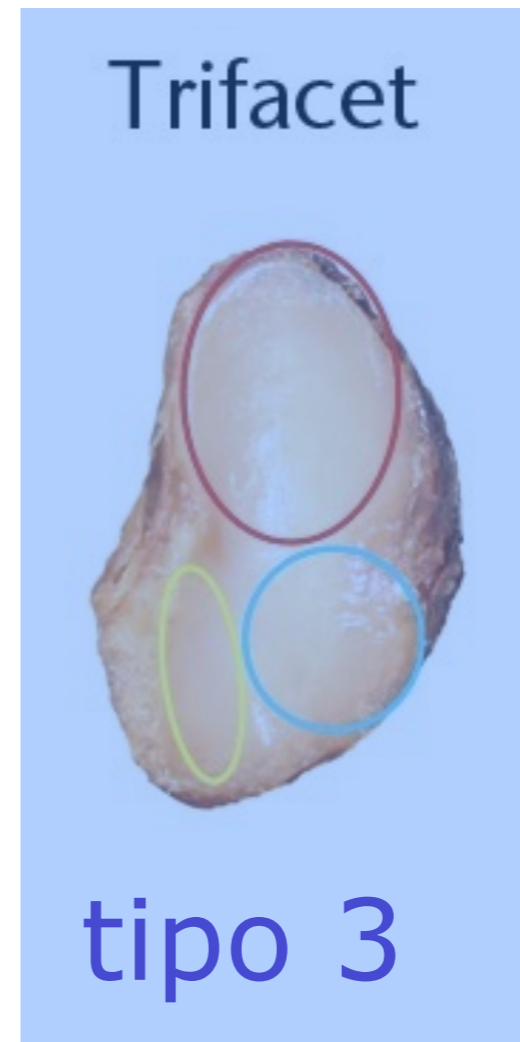
The first tarsometatarsal joint and its association with hallux valgus

L. W, Mason, H. Tanaka

Bone Joint Res. Jun 2012; 1(6): 99–103.

h valgus

-



The first tarsometatarsal joint and its association with hallux valgus

L. W, Mason, H. Tanaka

Bone Joint Res. Jun 2012; 1(6): 99–103.

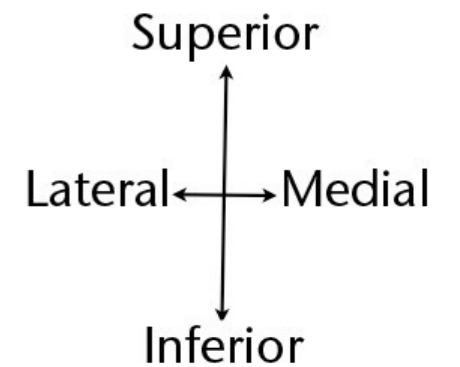
h valgus

+

Unifact



tipo 1



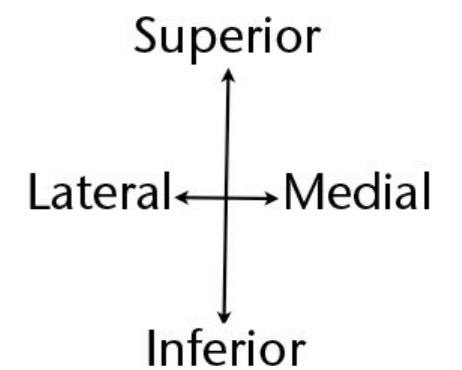
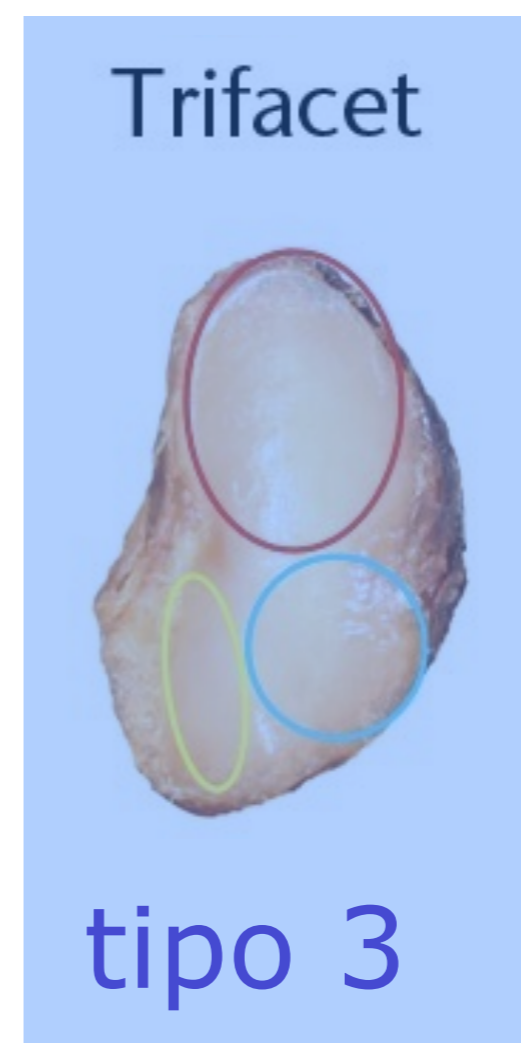
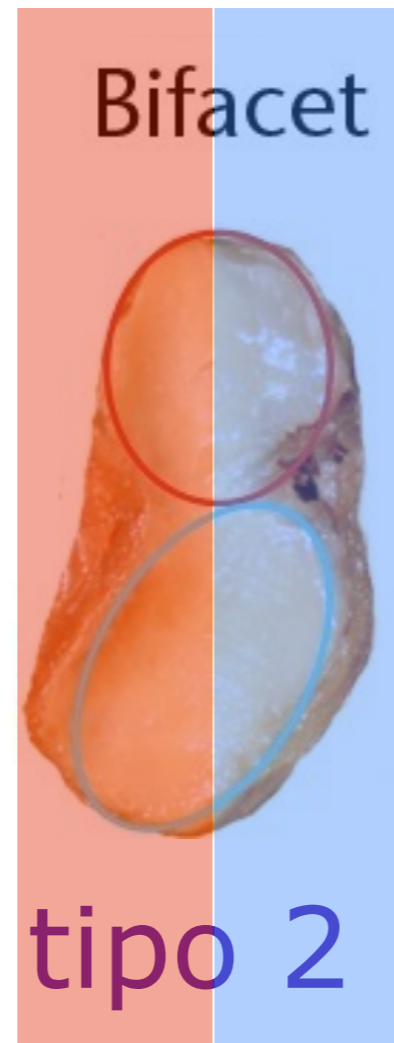
The first tarsometatarsal joint and its association with hallux valgus

L. W, Mason, H. Tanaka

Bone Joint Res. Jun 2012; 1(6): 99–103.

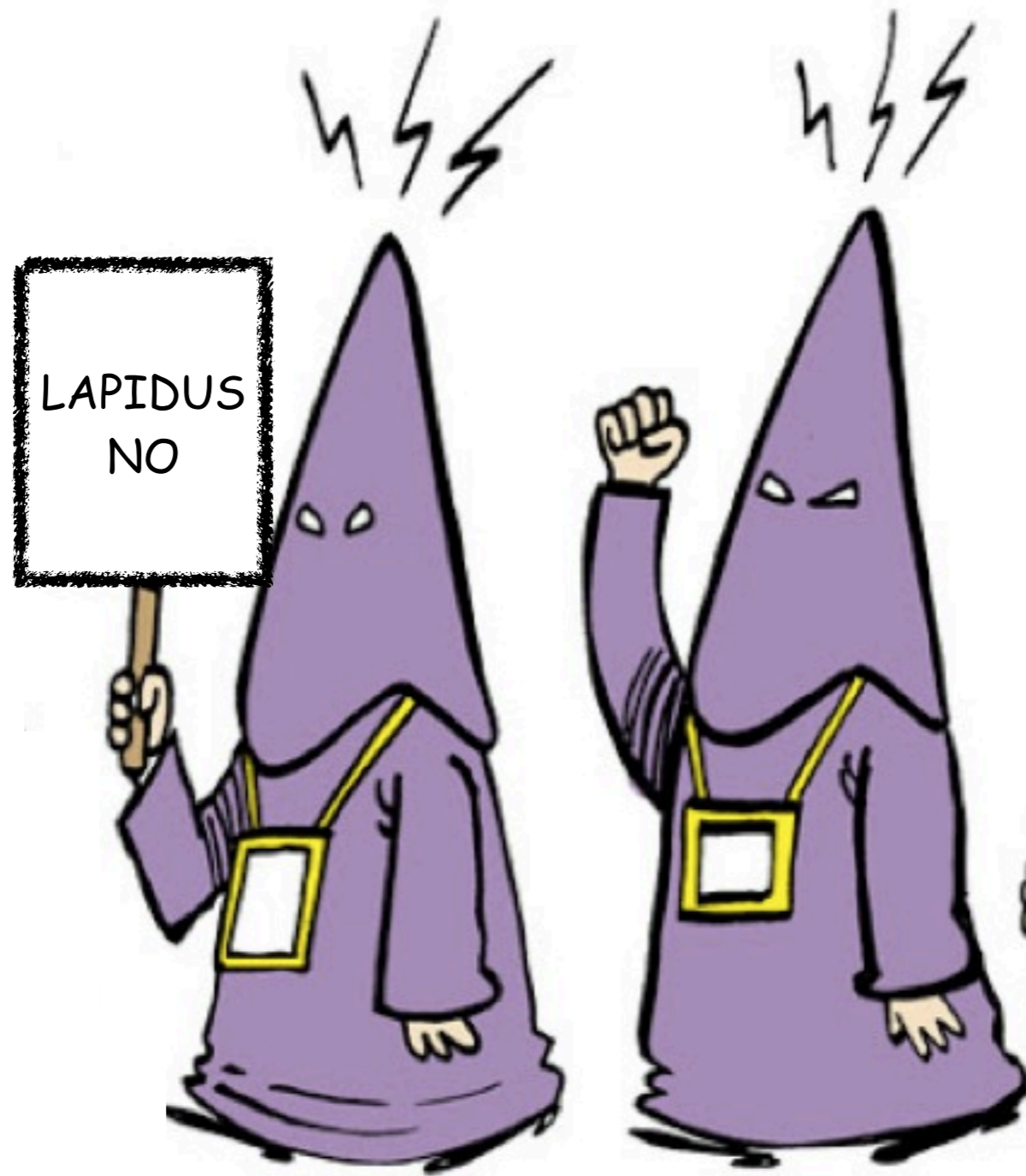
h valgus
+

h valgus
-



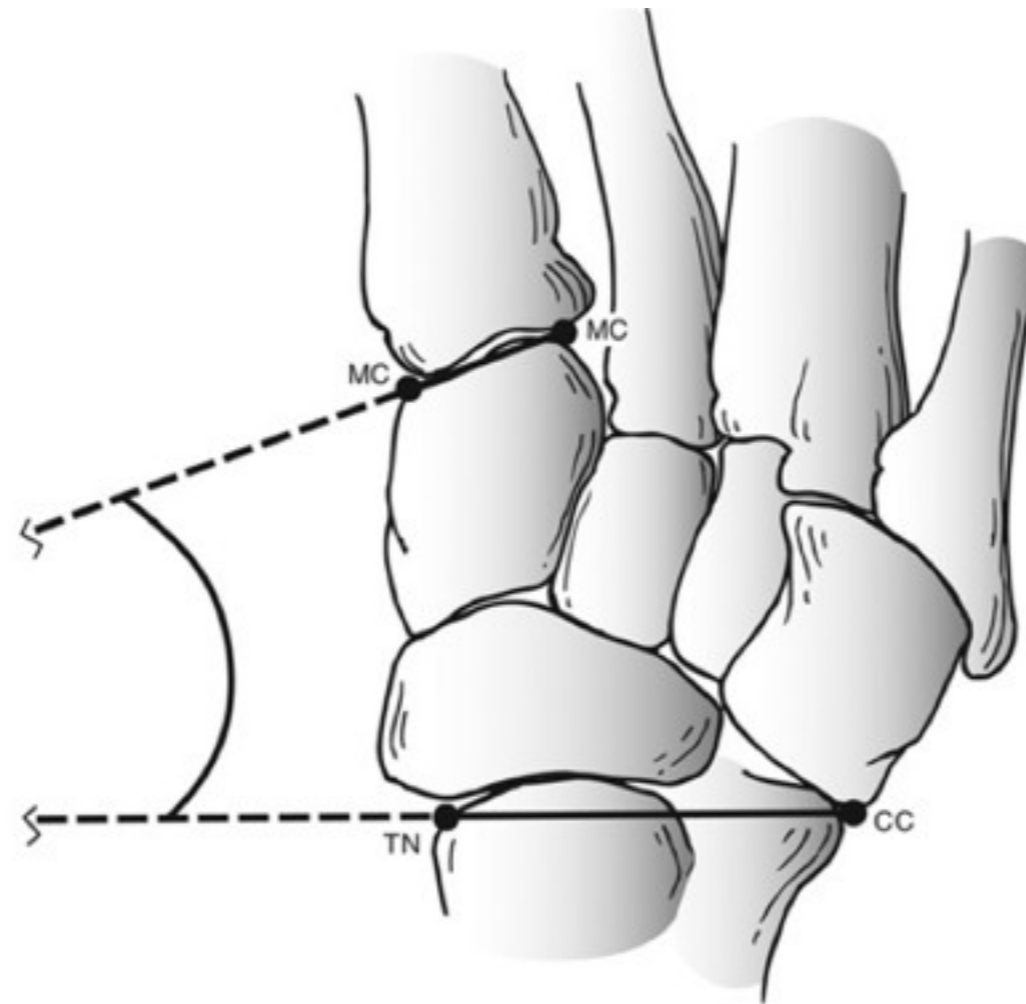
The first tarsometatarsal joint and its association with hallux valgus

L. W, Mason, H. Tanaka
Bone Joint Res. Jun 2012; 1(6): 99–103.



LAPIDUS
NO

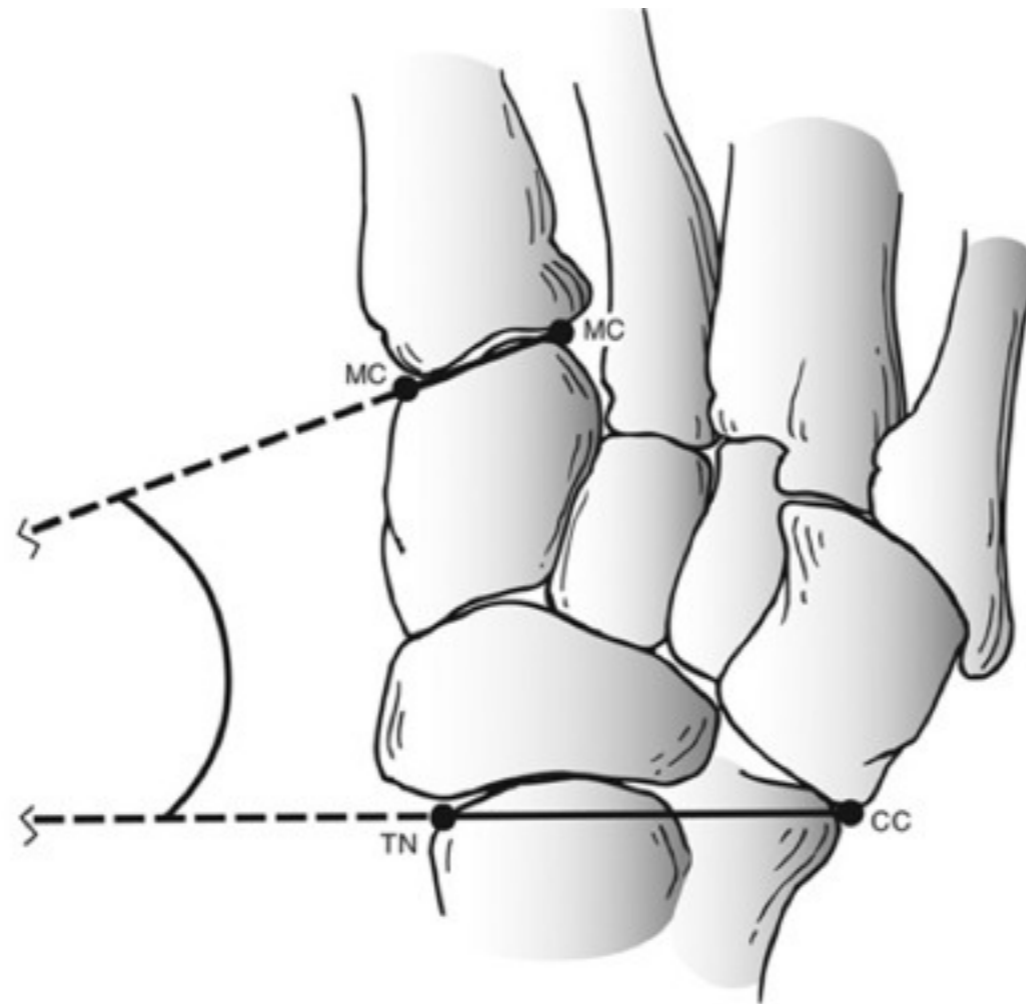
First MTC joint mobility **did not appear** to be dependent on the contour of the facets or the degree of medial inclination of the joint.



First Metatarsocuneiform Joint Mobility: Radiographic, Anatomic, and Clinical Characteristics of the Articular Surface

J. F. Doty, M. J. Coughlin, C. Hirose, F. Stevens, S. Schutt, P. Golanó, R. Viladot and R. Remington
Foot Ankle Int 2014 35: 504

First MTC joint mobility did not appear to be dependent on the contour of the facets or the degree of medial inclination of the joint. **However, an increase in medial inclination may be associated with the development or progression of a hallux valgus deformity**



First Metatarsocuneiform Joint Mobility: Radiographic, Anatomic, and Clinical Characteristics of the Articular Surface

J. F. Doty, M. J. Coughlin, C. Hirose, F. Stevens, S. Schutt, P. Golanó, R. Viladot and R. Remington
Foot Ankle Int 2014 35: 504

2007

Maintenance of Correction of First Metatarsal Closing Base Wedge Osteotomies Versus Modified Lapidus Arthrodesis for Moderate to Severe Hallux Valgus Deformity

Zachary Haas, DPM,¹ Graham Hamilton, DPM,² Daisy Sundstrom, DPM,³ and Lawrence Ford, DPM⁴

A retrospective radiographic review of 57 feet was conducted to compare maintenance of correction of the modified Lapidus arthrodesis with the first metatarsal closing base wedge osteotomy for moderate to severe hallux valgus deformity. Radiographic parameters were measured on the preoperative, early postoperative, and greater than 11-month postoperative weightbearing radiographs. These measurements included the intermetatarsal angle, the hallux abductus angle, and the tibial sesamoid position. The patients who underwent the closing base wedge osteotomy had an average initial intermetatarsal correction of 10.4°; for the modified Lapidus arthrodesis, it was 7.6°. The patients who underwent the closing base wedge osteotomy had an average loss of intermetatarsal correction of 2.55° from early to late postoperative radiographs; for the modified Lapidus arthrodesis, it was 1.08°. Our results demonstrated that the modified Lapidus arthrodesis maintains correction to a greater degree than the first metatarsal closing base wedge osteotomy with statistical significance ($P = .0039$). Both the modified Lapidus arthrodesis and the first metatarsal closing base wedge osteotomy are effective procedures with respect to degree of radiographic correction for moderate to severe hallux valgus deformities. (The Journal of Foot & Ankle Surgery 46(5):358-365, 2007)

Key words: hallux valgus, lapidus arthrodesis, closing base wedge osteotomy, correction, radiographic analysis

Surgical treatment of hallux valgus deformity consists of selecting the most appropriate procedure to achieve a good to excellent long-term result. Many factors are considered in the selection of the appropriate procedure for the patient. Patients' demographics and convalescence along with subjective, objective, and radiographic parameters must be

equally weighed (1-7). For the treatment of moderate to severe hallux valgus deformity, several proximal bunionectomies have been proposed with accompanying debate regarding optimal necessity and efficacy (8). Two of these common procedures are the modified Lapidus arthrodesis (LA) and the first metatarsal closing base wedge osteotomy (CBWO). Loison in 1901 originally described the CBWO (9), with Balancescu later performing the operation in 1903 (10). Albrecht has been credited with initially describing the first tarsometatarsal joint arthrodesis in 1911 (11), with popularization by Paul Lapidus in 1934 (12).

Once appropriate procedure selection has been made, outcome needs to be evaluated. Successful outcomes are determined by subjective and/or objective methods. Radiographic objective parameters include the angular correction after osteotomy or arthrodesis and the maintenance of angular correction. The measurements impart information regarding the ability to correct the initial deformity along with the ability to maintain this correction. There is a plethora of literature discussing short-term results of angular correction and patient satisfaction with various bunionectomies (1-3, 6, 7, 13-31). However, there is limited literature that evaluates

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¹Post Graduate Year 3, Kaiser San Francisco Bay Area Foot and Ankle Residency Program, Kaiser Permanente Medical Center, San Francisco, Oakland, Walnut Creek, CA.

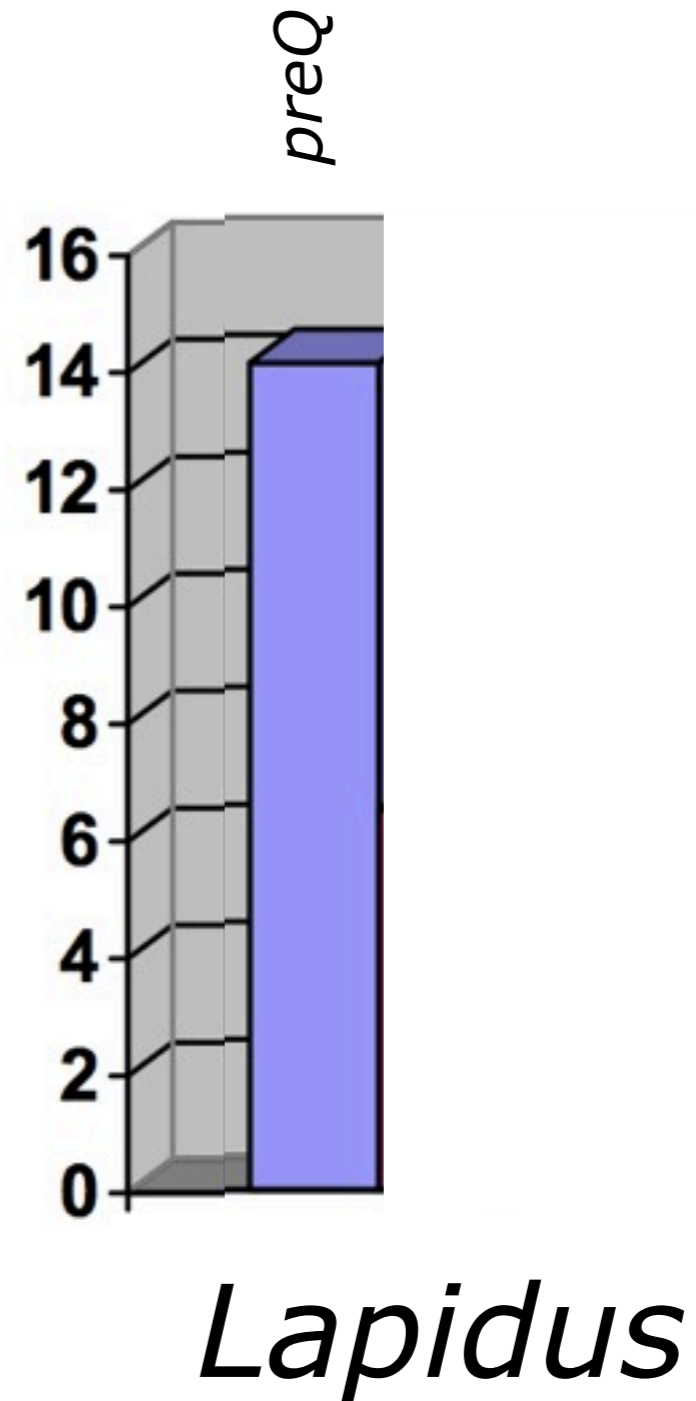
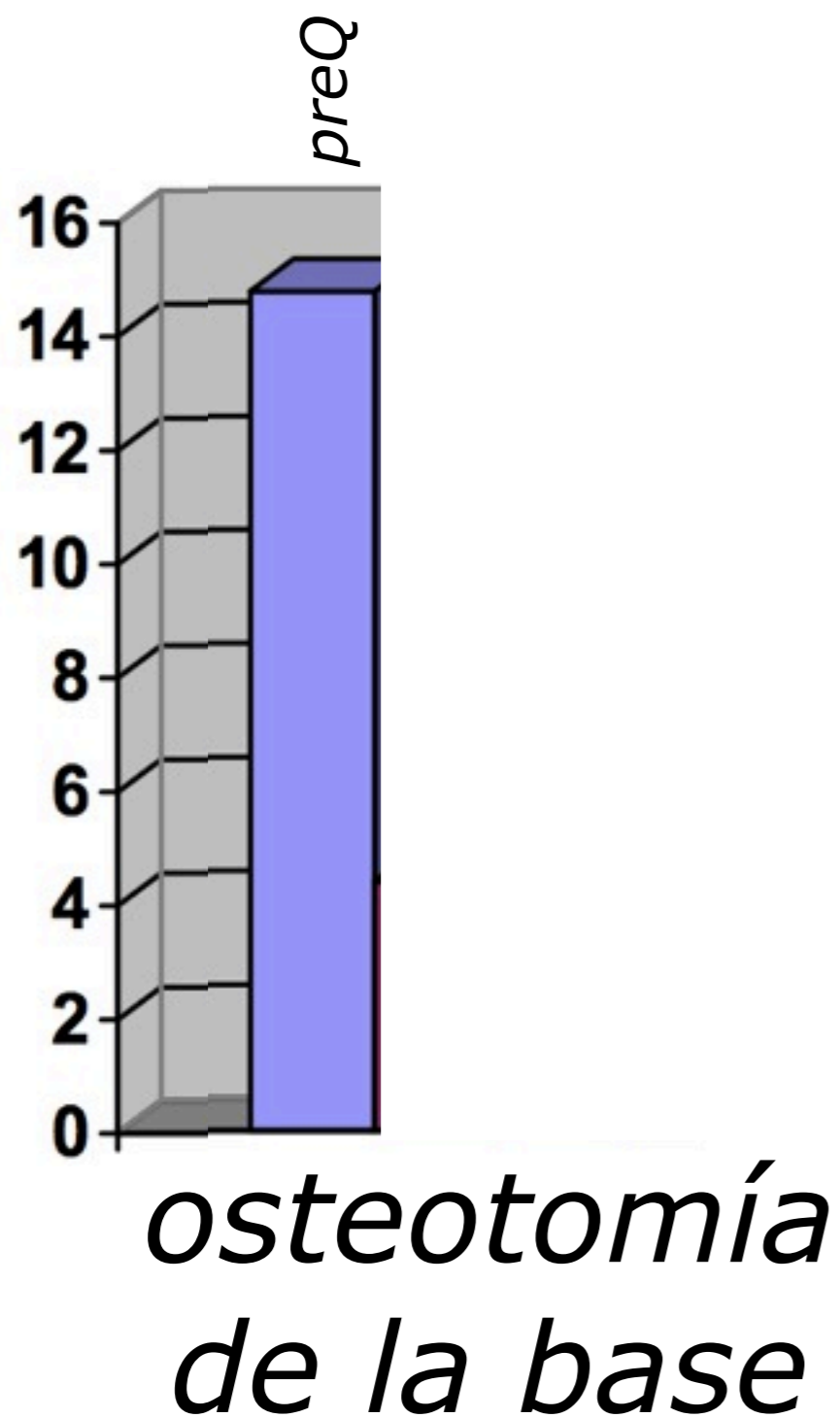
²Staff Podiatric Surgeon, Attending Staff, Kaiser San Francisco Bay Area Foot and Ankle Residency Program, Kaiser Permanente Medical Center, Oakland, San Francisco, Walnut Creek, CA.

³Staff Podiatric Surgeon, Attending Staff, Kaiser San Francisco Bay Area Foot and Ankle Residency Program, Kaiser Permanente Medical Center, Oakland, San Francisco, Walnut Creek, CA.

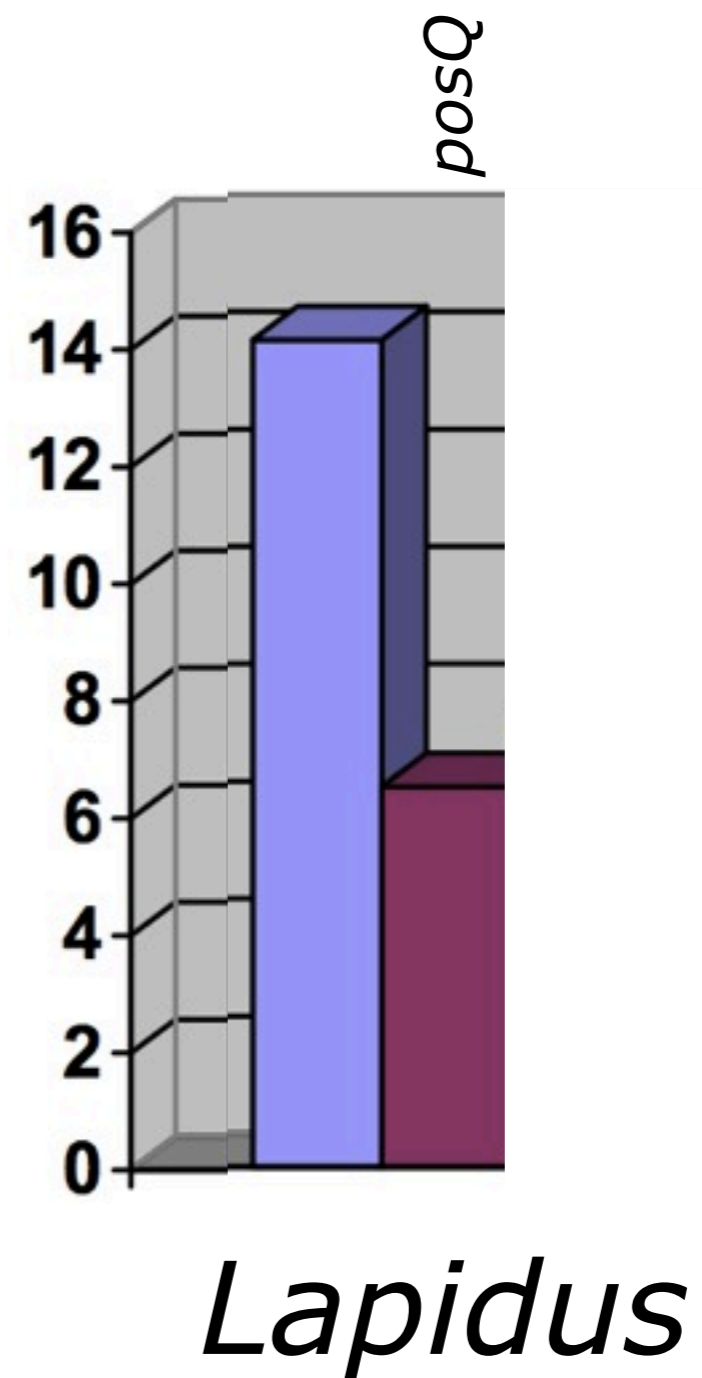
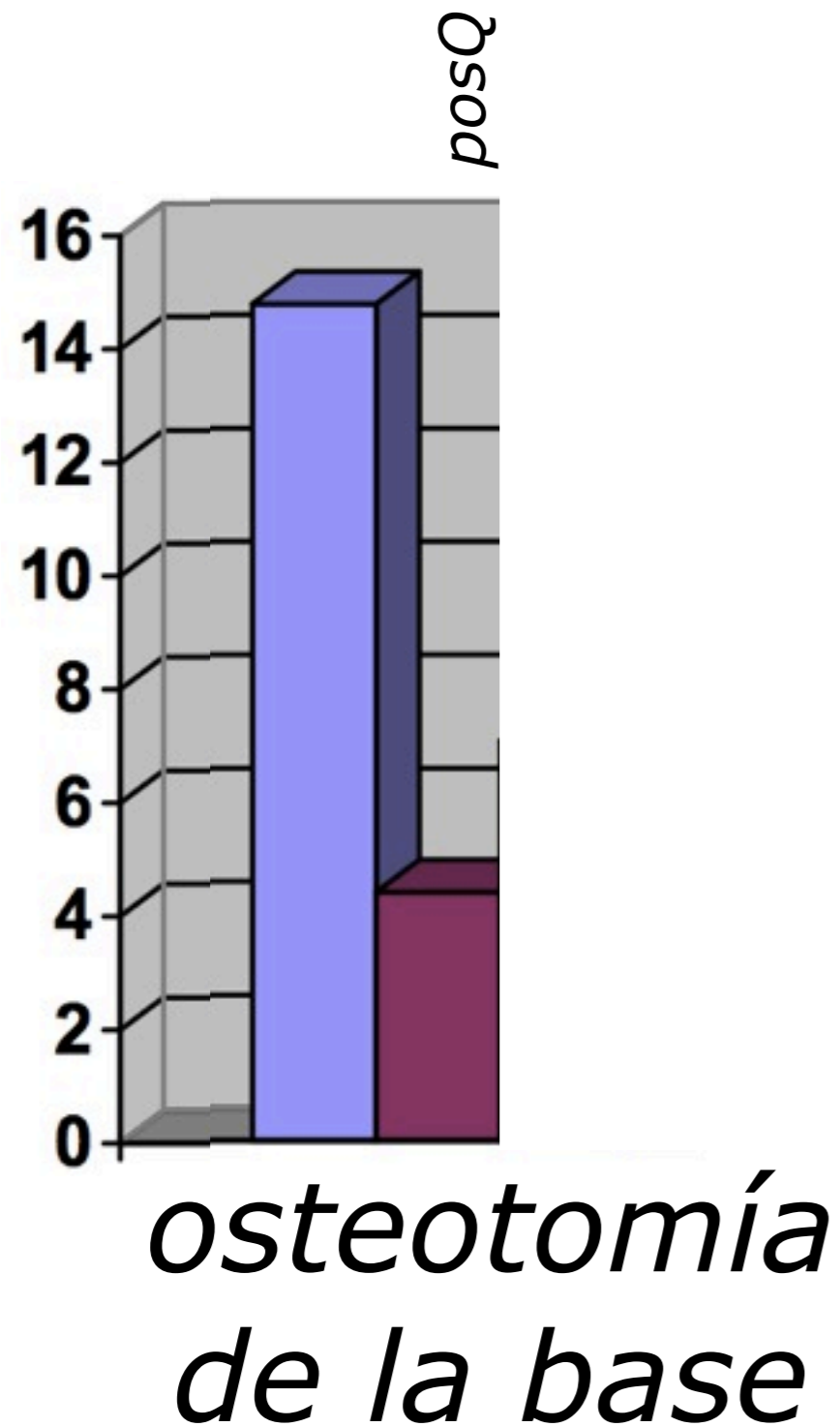
⁴Staff Podiatric Surgeon, Attending Staff, Residency Director, Kaiser San Francisco Bay Area Foot and Ankle Residency Program, Kaiser Permanente Medical Center, Oakland, San Francisco, Walnut Creek, CA.

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1067-2516/07/4605-0006\$32.00/0
doi:10.1053/j.fas.2007.05.008

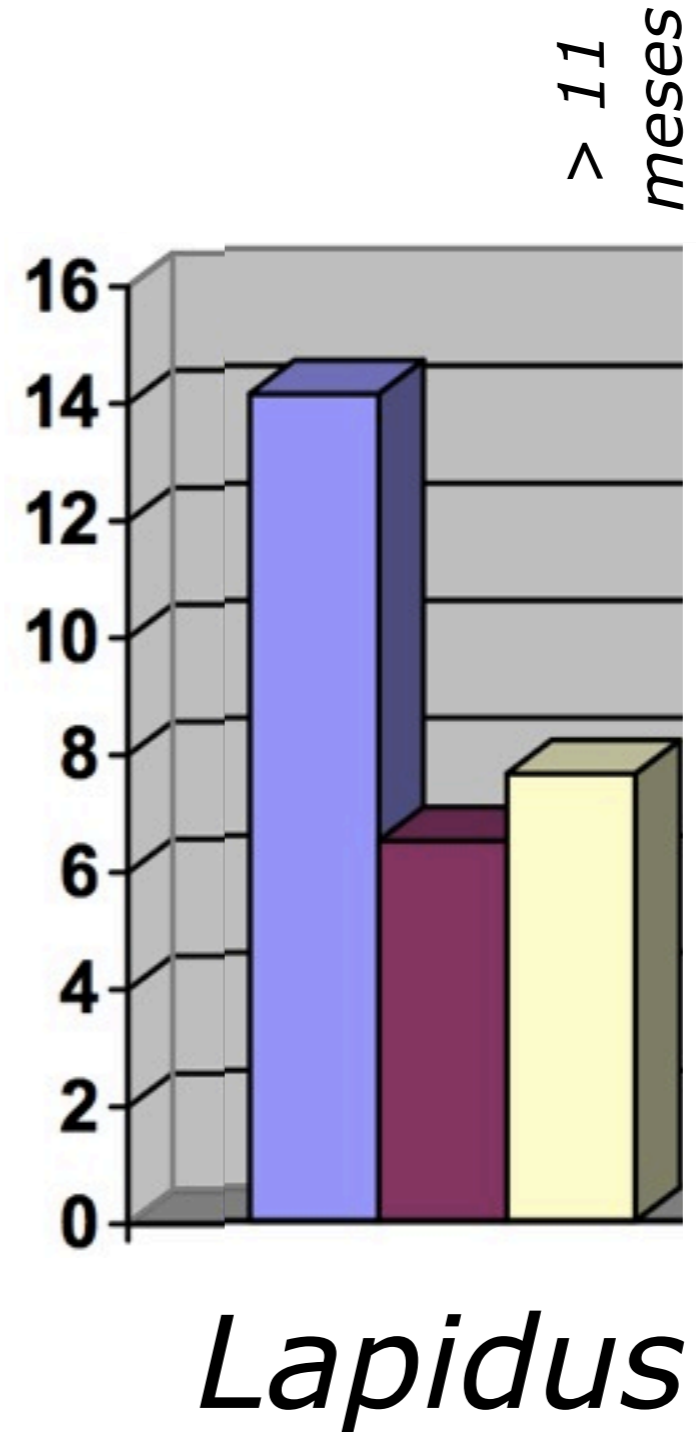
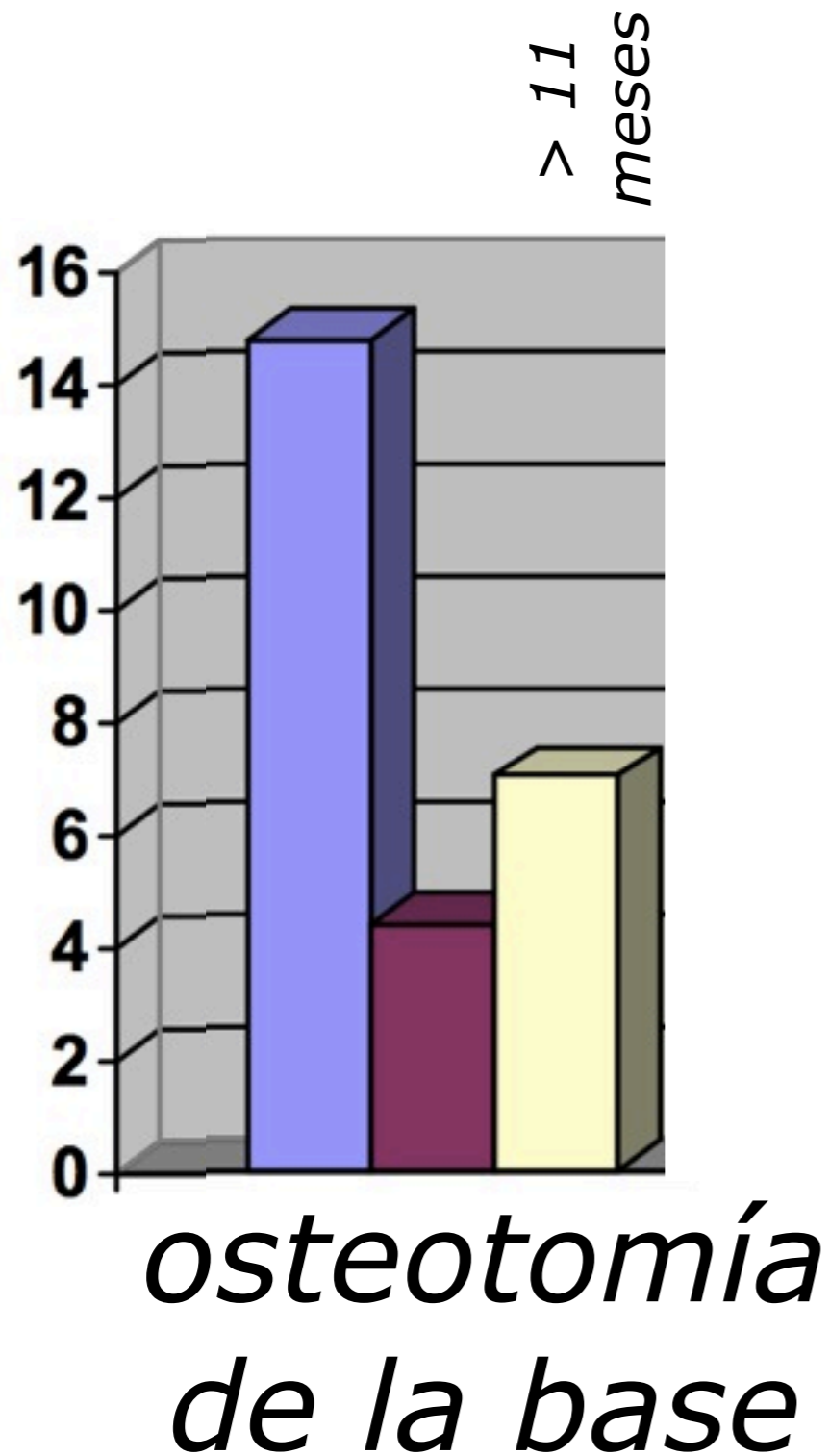
ángulo intermetatarsiano



ángulo intermetatarsiano



ángulo intermetatarsiano



“ This may suggest that a **tarsometatarsal joint arthrodesis and a near- anatomic first ray alignment may **have an additive effect on the inherent stability of the first ray**”**

Maintenance of correction of first metatarsal closing base wedge osteotomies versus modified ligidus arthrodesis for moderate to severe hallux valgus deformity

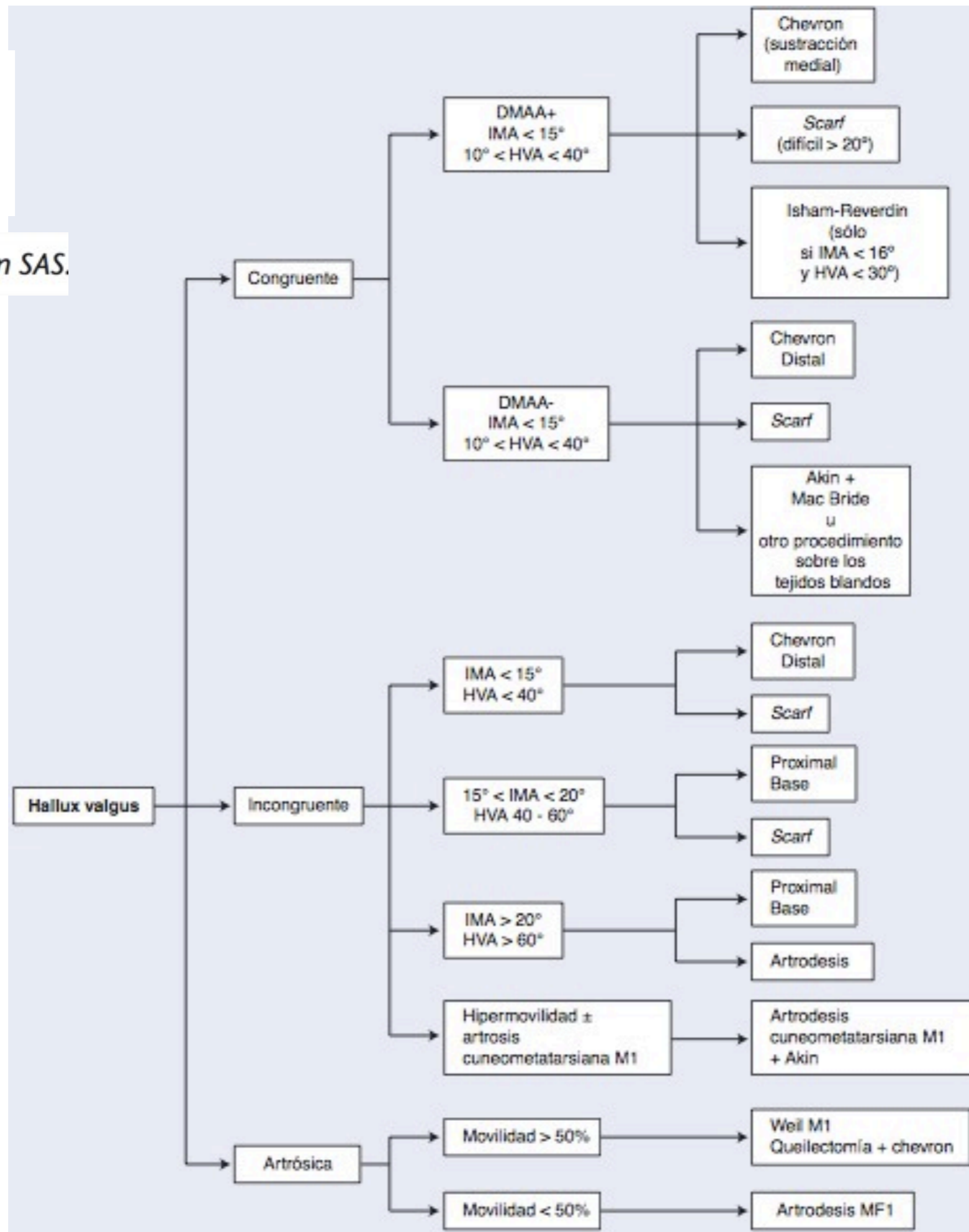
Zachary Haas, Graham Hamilton, Daisy Sundstrom, Lawrence Ford
The Journal of Foot & Ankle Surgery 46(5):358–365, 2007

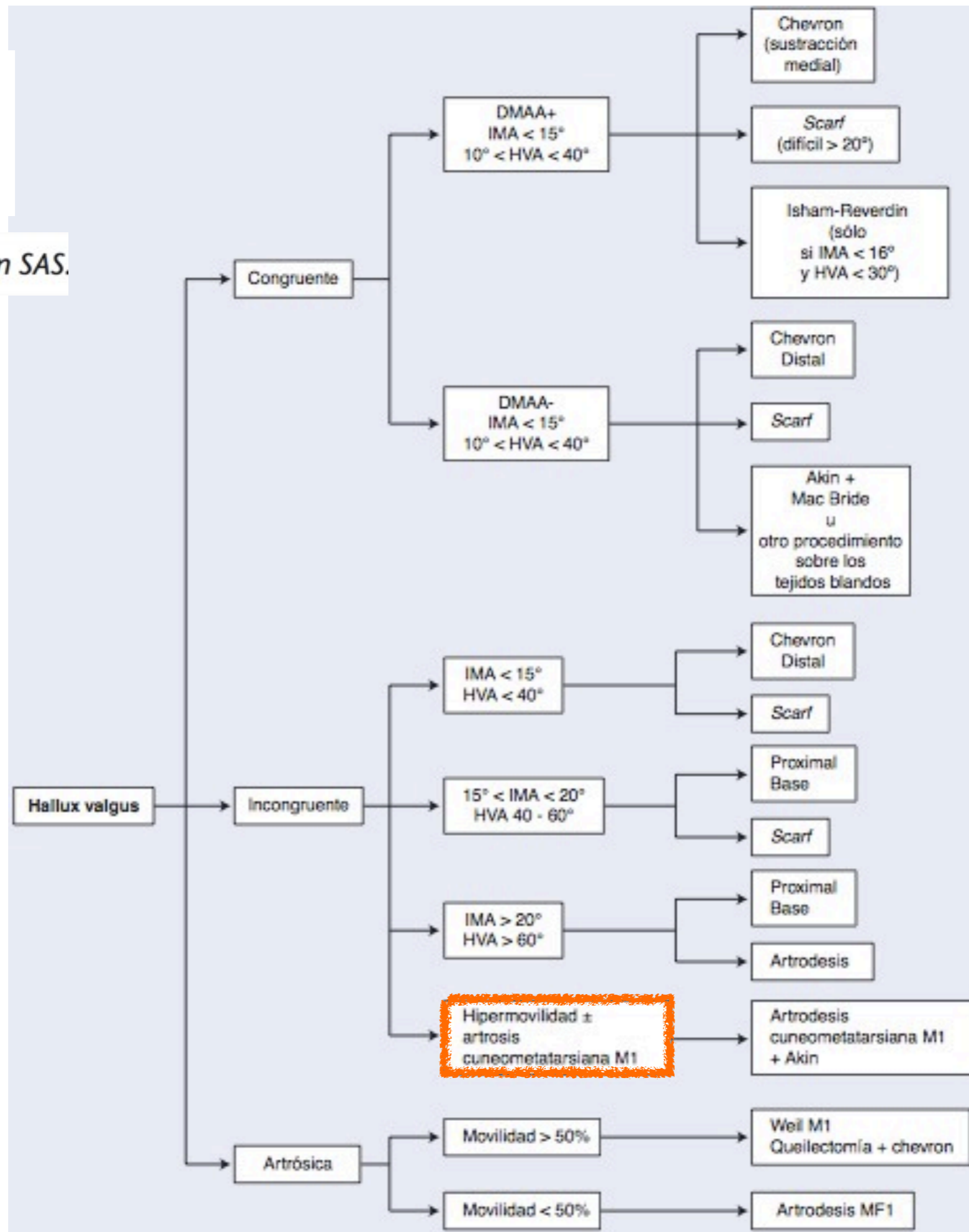
“Our findings suggest that the Lapidus arthrodesis may influence the medial longitudinal arch”

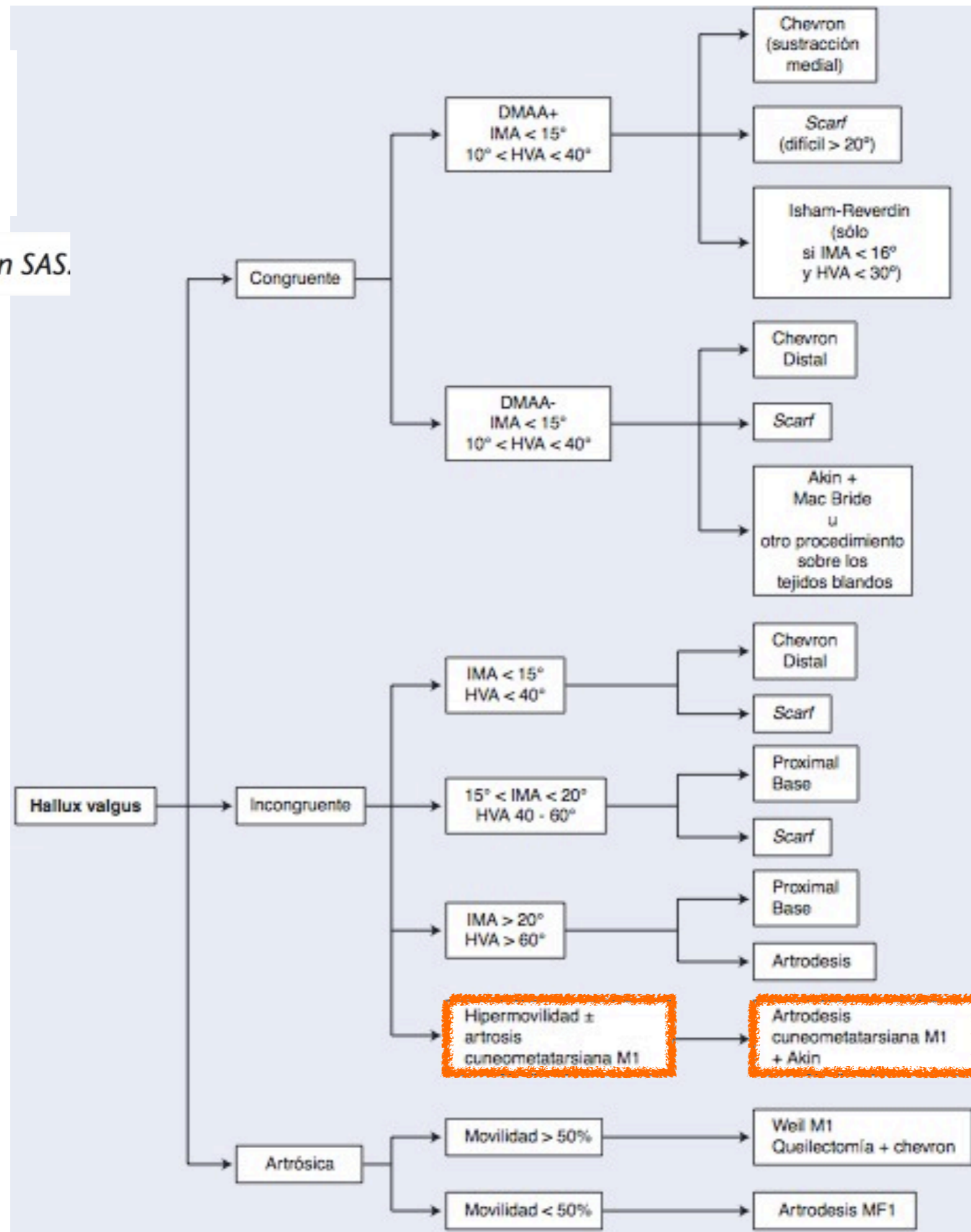
**The effect of the Lapidus arthrodesis on the medial longitudinal arch:
a radiographic review.**

Avino, A; Patel, S; Hamilton, GA; Ford, LA
J FootAnkle Surg. 47:510 – 514, 2008

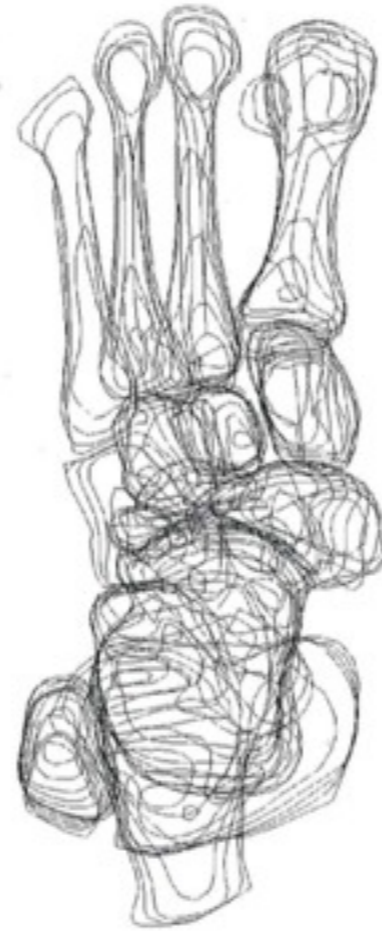
indicaciones







MECÁNICA CLÍNICA Y TERAPÉUTICA PIE Y TOBILLO



Principios biomecánicos

La historia mecánica de un paso

Diagnóstico de los principales cuadros clínicos

Aproximación al paciente con una patología mecánica de pie y tobillo

Principios del tratamiento ortopédico y quirúrgico

Qué efectos buscar y cuáles evitar

Dirección

Dres. Ernesto Maceira Suárez y Manuel Monteagudo de la Rosa

tercer "rocker"



(interno, pronación, o externo, supinación). Con el pie astragalino bien alineado, en la posición de puntillas, la interlínea de Lisfranc medial queda casi paralela al suelo, como la interlínea escafo-cuneana, y el **escafoides nivelado** sirve al astrágalo de banqueta. La superficie de la banqueta escafoidea en el tercer rocker, debe quedar mirando hacia arriba y atrás, para asumir el encaje de la cabeza del astrágalo. Esa banqueta debe quedar nivelada con respecto al plano del suelo, para no volcar su carga a ninguno de los lados. Una inestabilidad en la primera cúneo-metatarsiana, o un excesivo acortamiento del primer radio, que no se pueda compensar con su flexión plantar, hará que la banqueta escafoides se incline hacia el lado medial, y con ello hará

tercer "rocker"



tercer "rocker"



tercer "rocker"



escafo-cuneana, y el escafoides nivelado sirve al astrágalo de banqueta. La superficie de la banqueta escafoidea en el tercer rocker, debe quedar mirando hacia arriba y atrás, para asumir el encaje de la cabeza del astrágalo. Esa banqueta debe quedar nivelada con respecto al plano del suelo, para no volcar su carga a ninguno de los lados. **Una inestabilidad en la primera cúneo-metatarsiana, o un excesivo acortamiento del primer radio, que no se pueda compensar con su flexión plantar, hará que la banqueta escafoides se incline hacia el lado medial, y con ello hará que el astrágalo pierda su alineación correcta con los metatarsianos.**

escafo-cuneana, y el escafoides nivelado sirve al astrágalo de banqueta. La superficie de la banqueta escafoidea en el tercer rocker, debe quedar mirando hacia arriba y atrás, para asumir el encaje de la cabeza del astrágalo. Esa banqueta debe quedar nivelada con respecto al plano del suelo, para no volcar su carga a ninguno de los lados. Una inestabilidad en la primera cúneo-metatarsiana, o un excesivo acortamiento del primer radio, que no se pueda compensar con su flexión plantar, hará que la banqueta escafoides se incline hacia el lado medial, y con ello hará que el astrágalo pierda su alineación correcta con los metatarsianos.

tercer "rocker"



indicaciones

“biomecánicas”



inestabilidad cuneo - mtt

M1 corto



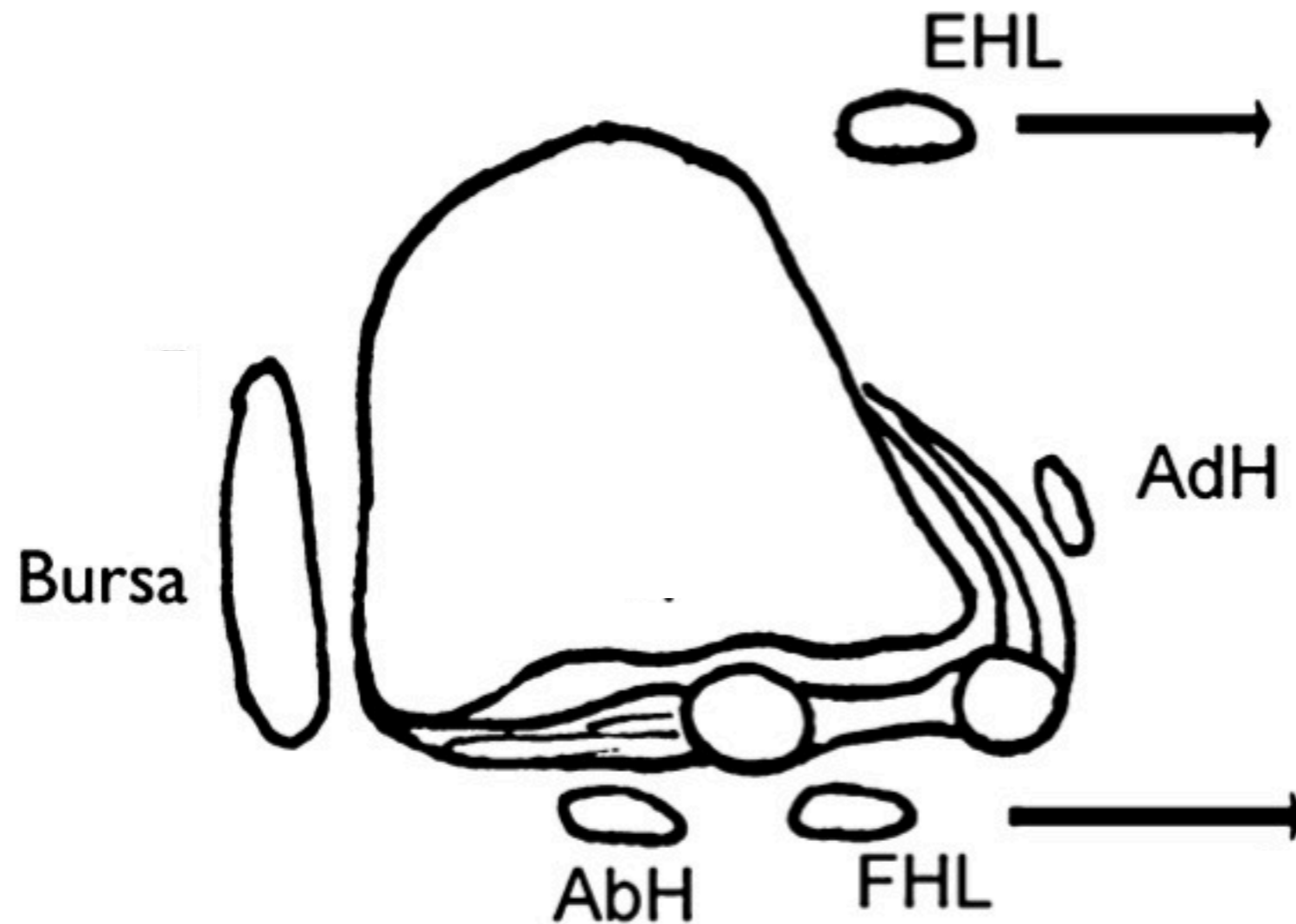
pronación del retropie



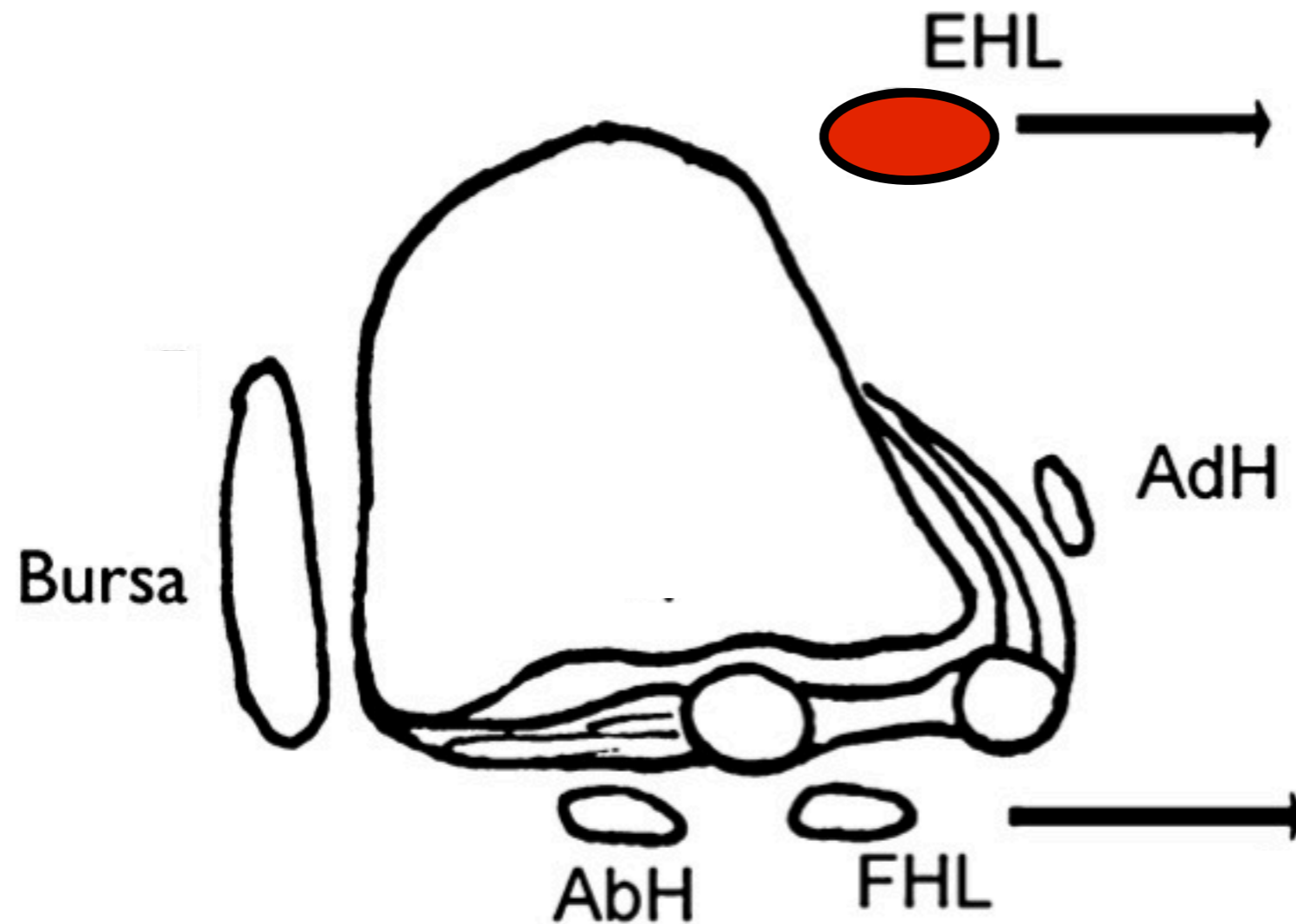
“sustitución extensora”



“sustitución extensora”



“sustitución extensora”

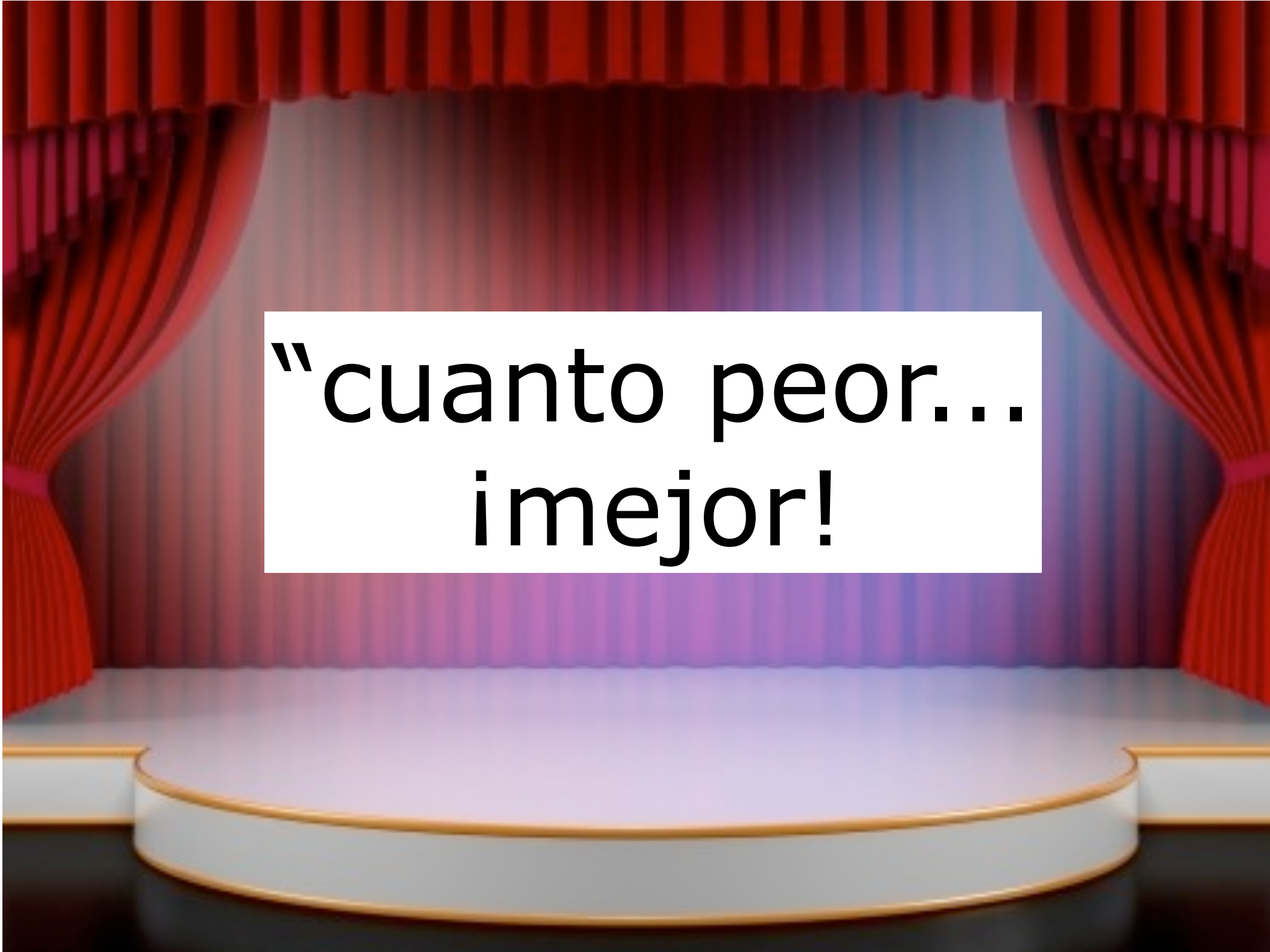


de un radio menor vecino, etc. La resolución de una sobrecarga de tercer rocker suele precisar del acortamiento de los radios implicados, hasta conseguir una parábola index plus-minus. Pero puede plantearse de otra forma, por ejemplo estabilizando un primer radio inestable con una fusión en el mediopié, como se hace en la técnica de Lapidus modificada de la primera cúneo-metatarsiana, en la que se persigue un efecto de abducción y flexión plantar, que permitirá que el primer meta trabaje adecuadamente durante la fase propulsiva aunque sea corto. Otras

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indicaciones

“prácticas”

A stage with red curtains and a white podium. The text is centered on a white rectangular background.

“cuanto peor...
¡mejor!

“cuanto peor....”



...mejor"





también en
combinación

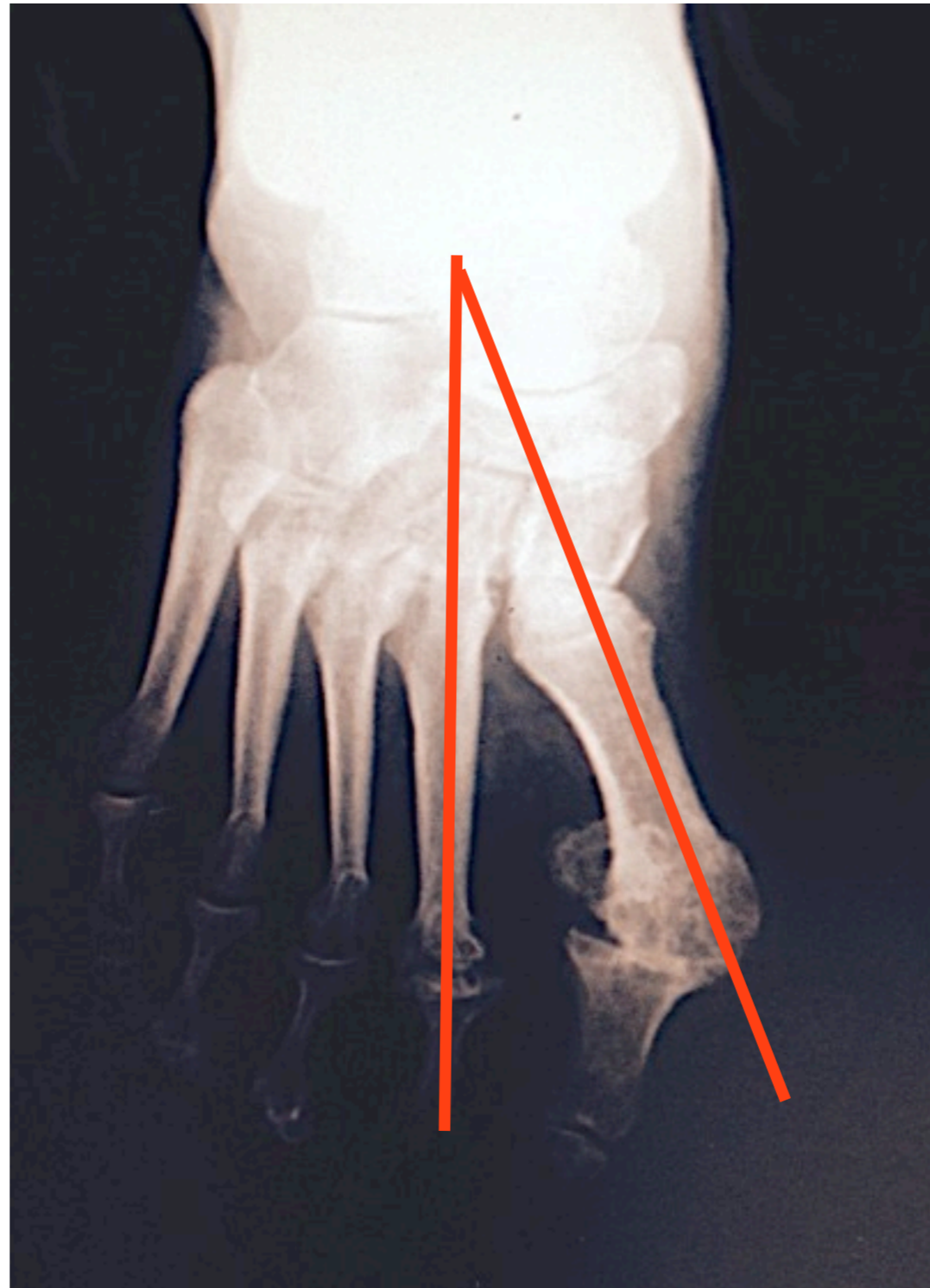


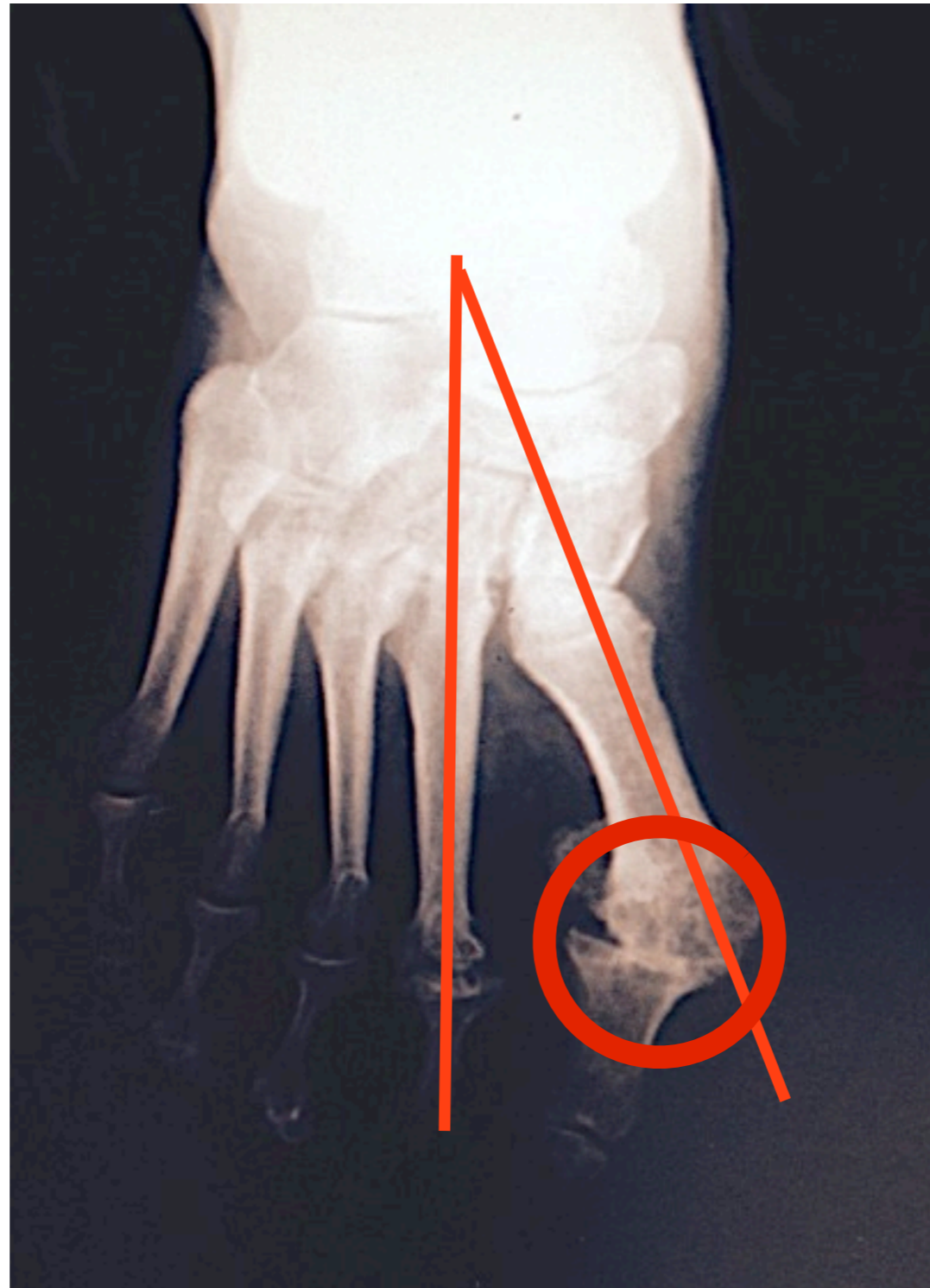


Combination of first metatarsophalangeal joint arthrodesis and proximal correction for severe hallux valgus deformity

Pascal F. Rippstein, Young-Uk Park, Florian D. Naal

Foot Ankle Int 2012 33: 400

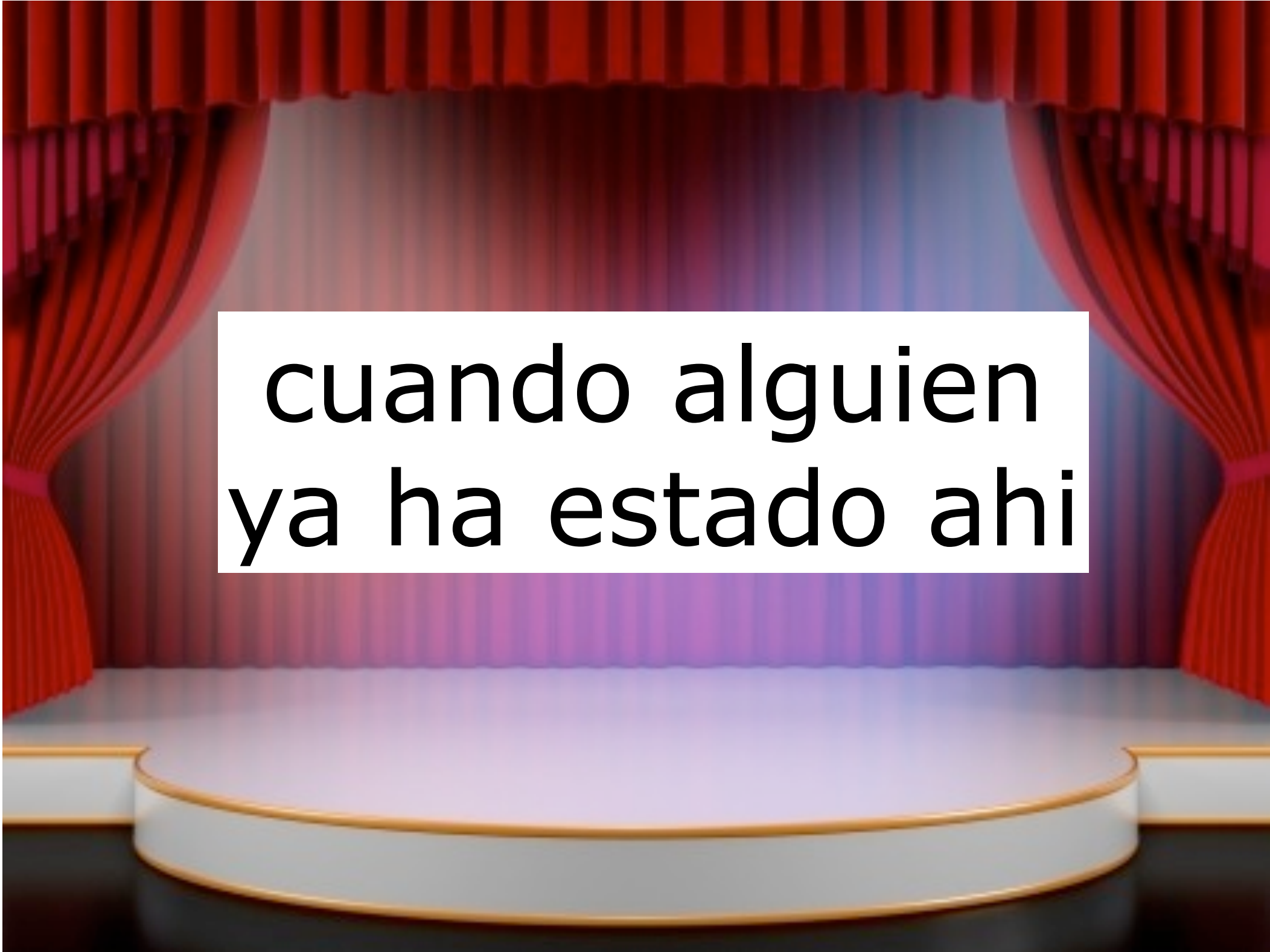








8 semanas

A stage with red curtains and a white podium. The text is centered on a white rectangular background.

cuando alguien
ya ha estado ahi



complicaciones



n: 106

TABLE 2 Complications

Complications	No.
---------------	-----

**Lapidus Arthrodesis for Management of Hallux Valgus.
A Retrospective Review of 106 Cases**

Oda Rink-Brüne

volv 43, num 5, september-october 2004

n: 106

TABLE 2 Complications

Complications	No.
Minor	
Delayed healing (>3 months)	17
Clinical undercorrection	1
Sesamoiditis	2
Metatarsalgia	3
Temporary dysesthesias	1

**Lapidus Arthrodesis for Management of Hallux Valgus.
A Retrospective Review of 106 Cases**

Oda Rink-Brüne

volv 43, num 5, september-october 2004

n: 106

TABLE 2 Complications

Complications	No.
Major	
Infection	0
Nonunion	2
Thrombosis	1
Complex regional pain syndrome	3

**Lapidus Arthrodesis for Management of Hallux Valgus.
A Retrospective Review of 106 Cases**

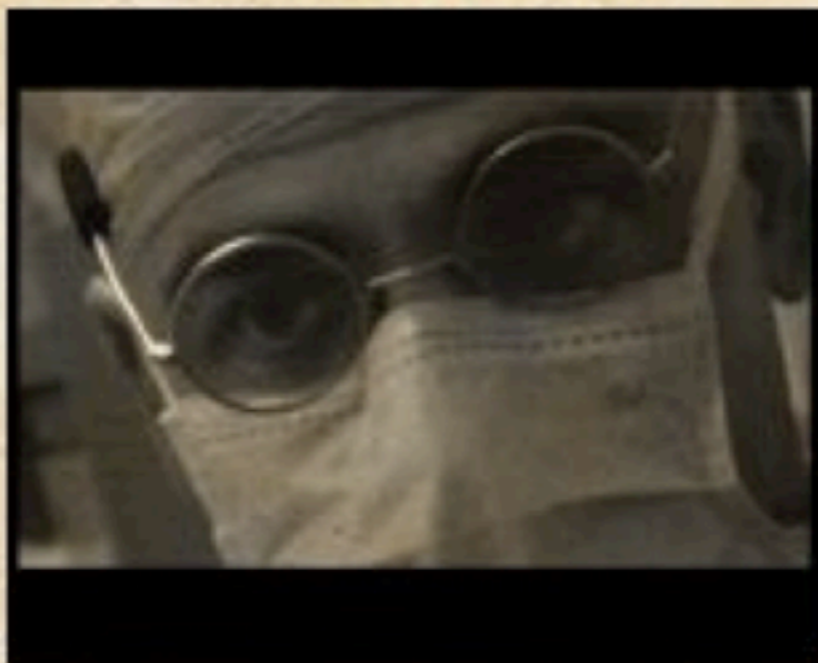
Oda Rink-Brüne

volv 43, num 5, september-october 2004

GlassGiant.com

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\$2500 REWARD

A close-up photograph of two hands wearing white, textured gloves. The hands are positioned as if one is holding or supporting the other. The background is solid black. The text 'eskerririk asko!' is written in white, sans-serif font across the back of the hand on the left. The text 'gracias!' is written in white, sans-serif font across the back of the hand on the right.

eskerririk asko!

gracias!

www.amediavilla.com

A close-up photograph of two hands wearing white, textured gloves. The hands are positioned as if one is holding or supporting the other. The background is solid black. The text 'eskerrik asko!' is written in white, sans-serif font across the back of the hand on the left. The text 'gracias!' is written in white, sans-serif font across the back of the hand on the right.

eskerrik asko!


gracias!

www.amediavilla.com



tasa “razonable” de no-uni3n






**V JORNADA DE
ACTUALIZACIÓN EN
CIRUGÍA DE PIE Y TOBILLO**

+ N COMPLEJO HOSPITALARIO DE NAVARRA PAMPLONA

28 de Noviembre de 2014
Salón de actos del
Hospital Virgen del Camino

Coordinador: Andrea D'Arrigo
Jefe de Sección: Javier Muñoa



Dr. IÑAKI MEDIAVILLA
Prof. Asociado de la Universidad del País Vasco
Hospital Universitario Basurto
Bilbao

