

HALLUX VALGUS

SURGICAL PLANNING

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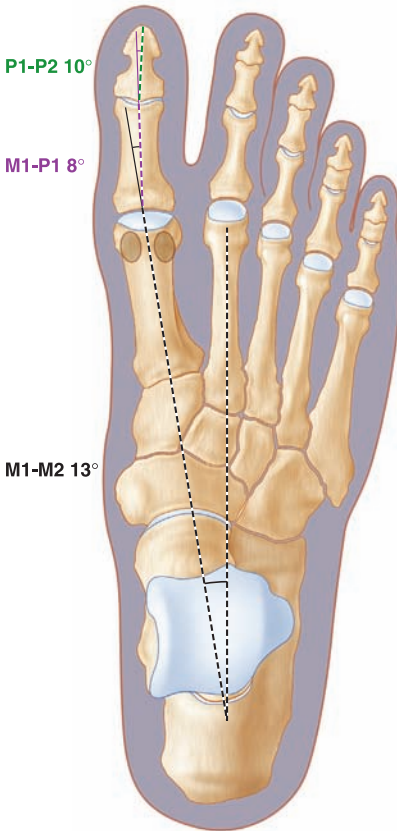
Several parameters should be taken into account in managing Hallux Valgus: the condition of cartilage, bony alignments, articular alignments and congruence.

Arthrodesis should be considered in the following cases:

- major deformity,
- gross cartilaginous damage,
- or special situations (recurrence, overall medical status).



Radiograph of a severe Hallux Valgus



Alignment of a normal foot

ANALYSIS OF THE BONY ALIGNMENTS

- **M1 - M2** : distal osteotomy should be avoided with angles above 20°.
- **M1 - P1** : defines Hallux Valgus but of little significance in planning.

ANALYSIS OF ARTICULAR ALIGNMENTS

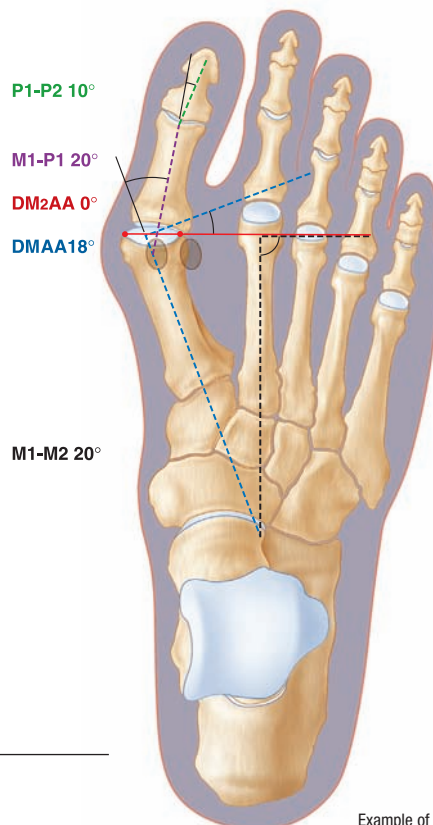
- **DMAA** : describes the lateral slope of the articular surface of M1 head in relation to the long axis of M1.

The DMAA is considered positive when the angle is greater than 7°.

- **DM2AA** : describes the lateral slope of the articular surface of M1 head in relation to the long axis of M2 (axis of the foot).

The DM2AA is considered positive if the head is valgus, negative if varus.

> The aim is to re-establish a neutral orientation of M1 head in relation to the long axis of M2 (DM2AA = 0 means the the axis of M1 cartilage surface is perpendicular to the axis of M2).

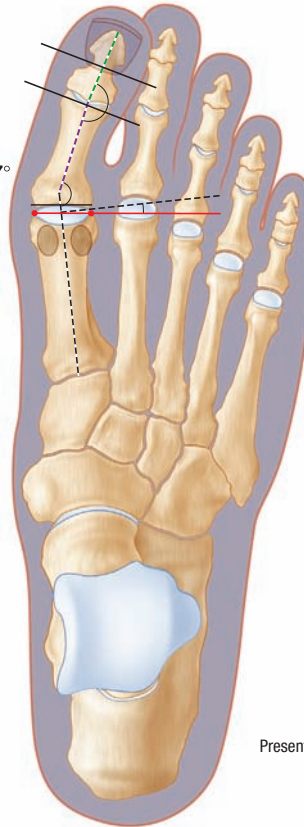


Example of Hallux Valgus

ANALYSIS OF THE ARTICULAR AXES (continued)

- **Interphalangeal valgus:** indicates the curvature of P1.
- > The aim is to recreate a parallelism between the base and head of the P1.

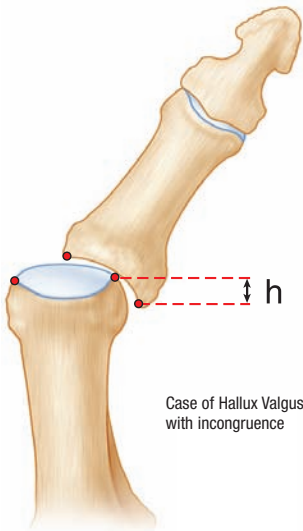
DMAA 7°



Presentation of an interphalangeal valgus

ANALYSIS OF ARTICULAR CONGRUENCE

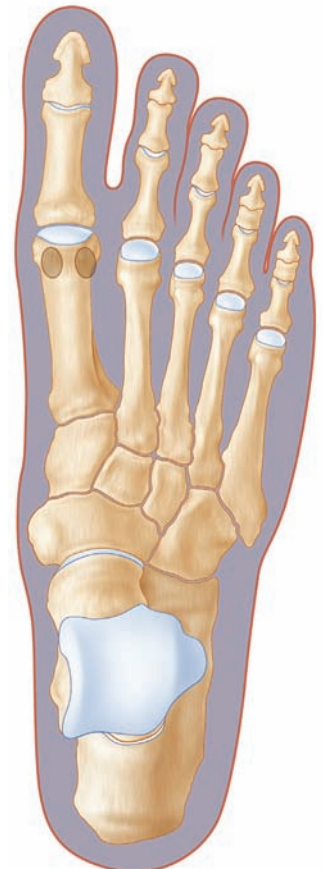
Articular congruence must be restored. Incongruence may necessitate shortening of the first ray (metatarsal or phalanx).



Radiograph of incongruence

MORPHOLOGICAL ANALYSIS OF THE FOOT

In the case of an Egyptian type foot the proximal phalanx of the great toe must be shortened.



Example of pronounced Egyptian foot type

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