SCARF OSTEOTOMY

Surgical Technique

2° EFAS CADAVER COURSE
BARCELONA

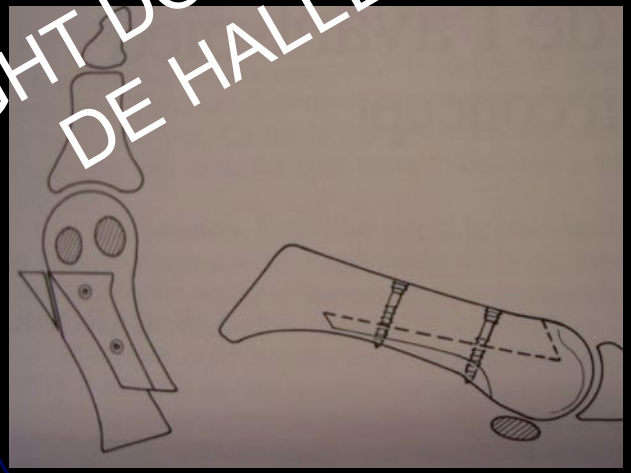
J de Halleux

February 6th-7th 2014

INTRODUCTION

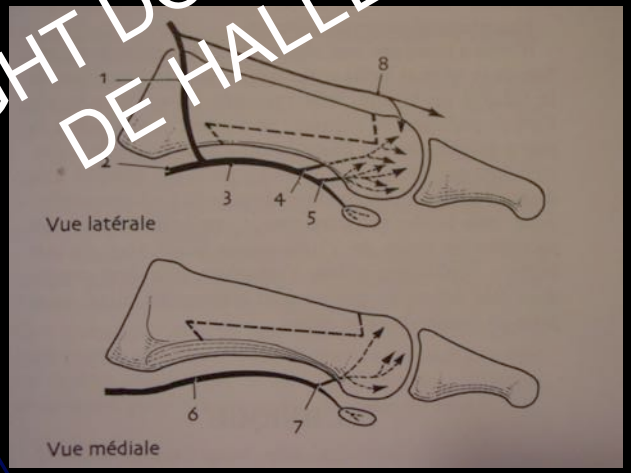
SCARF

- Woodworking term to describe interlocking joints
- Modification of the « Jupiter cut » used by carpenters



INTRODUCTION

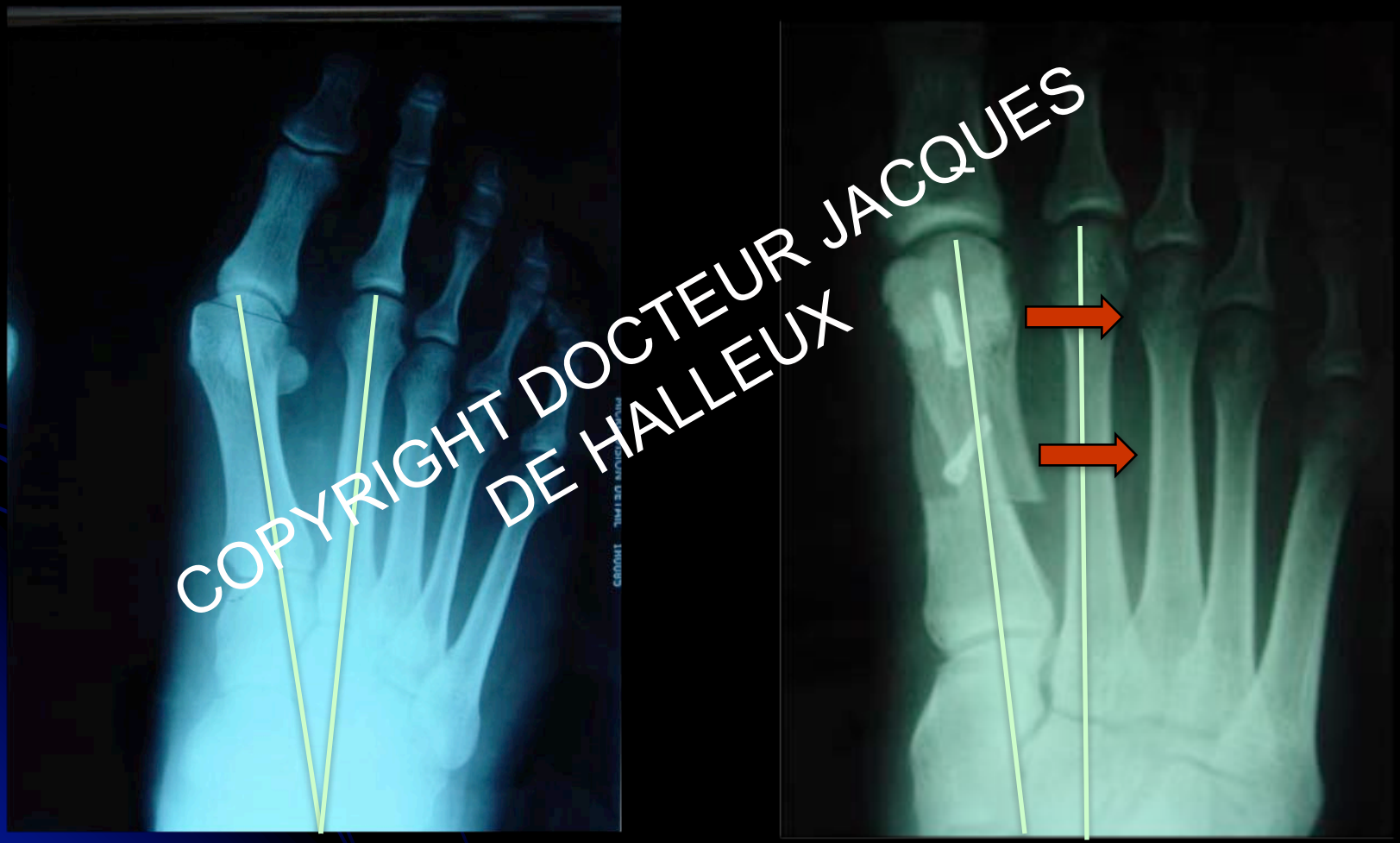
- **Advantages of the Scarf osteotomy :**
  - Great inherent stability
  - Undisturbed blood supply to MT1



Advantages of the Scarf osteotomy

Deformity correction in different planes:

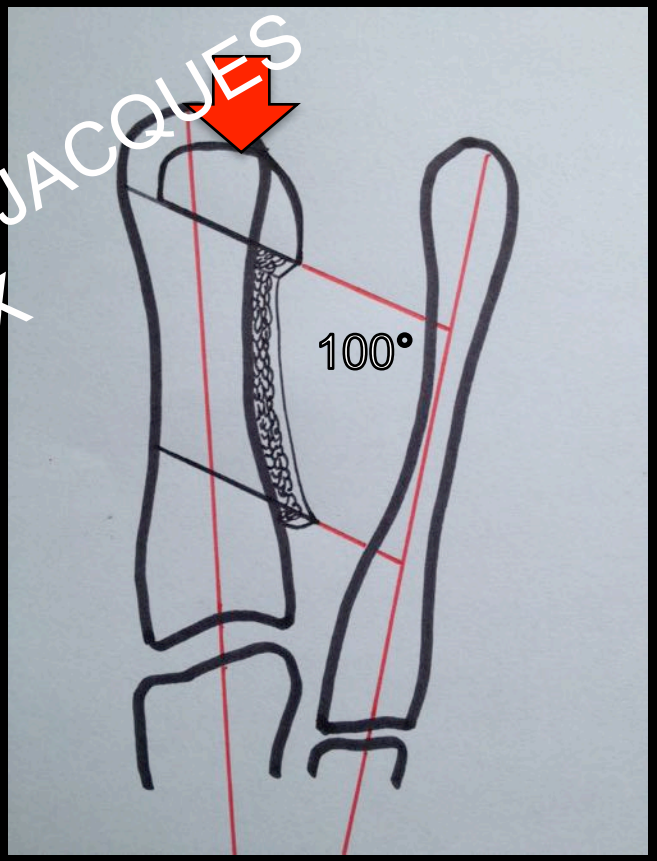
1° LATERAL TRANSLATION



Advantages of the Scarf osteotomy

Deformity correction in different planes:

2° SHORTENING



Advantages of the Scarf osteotomy

Deformity correction in different planes:

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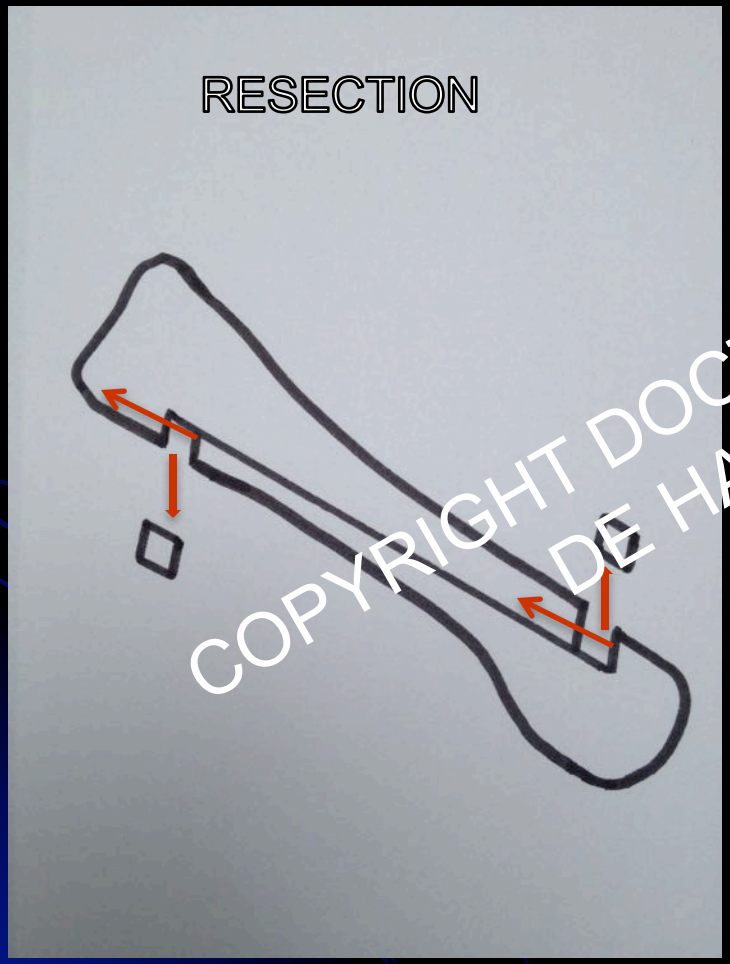
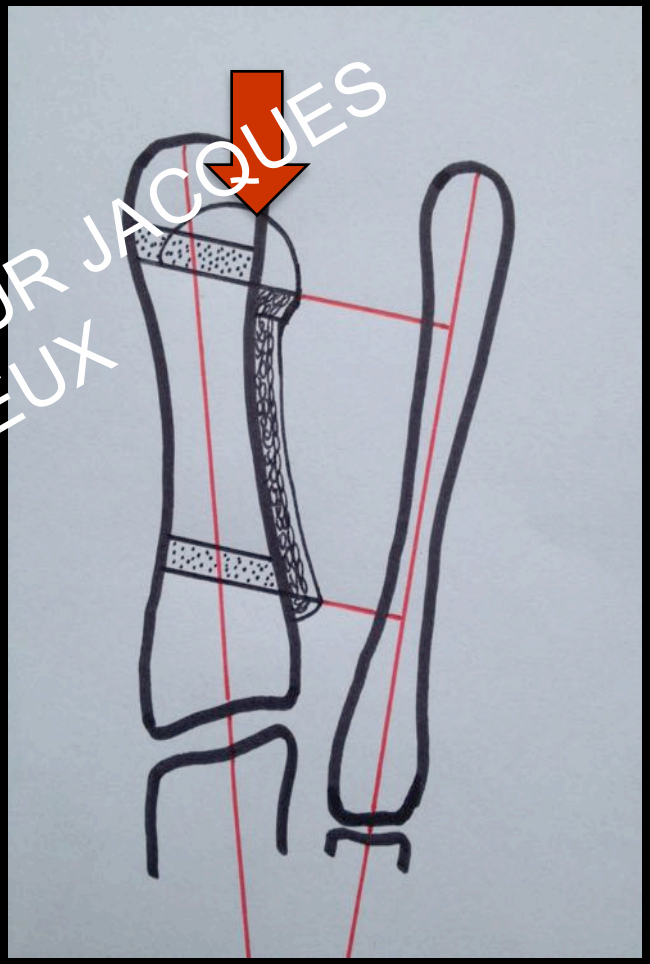
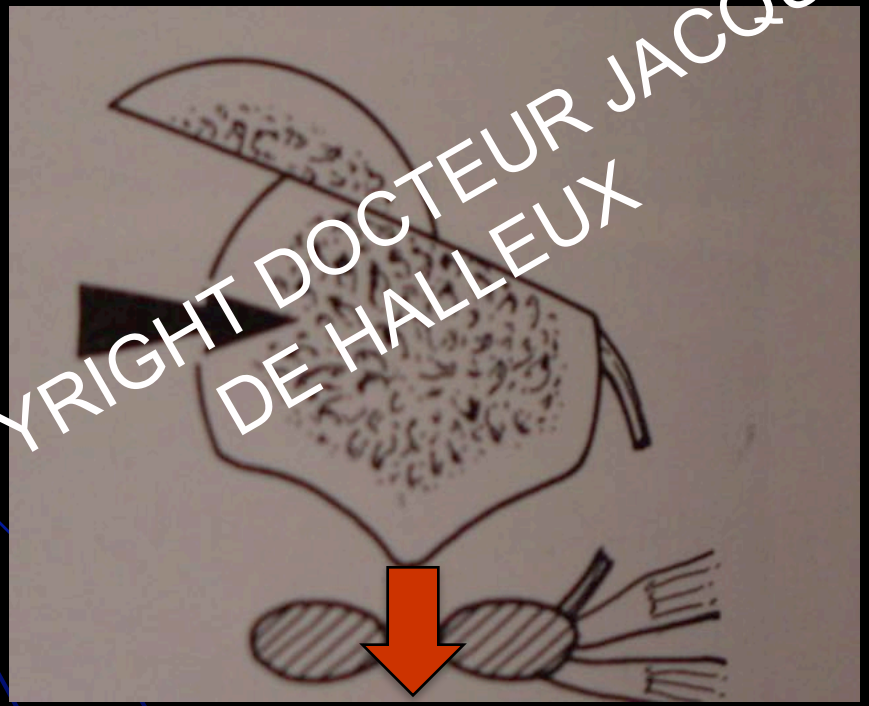




Advantages of the Scarf osteotomy

Deformity correction in different planes:

3° LOWERING

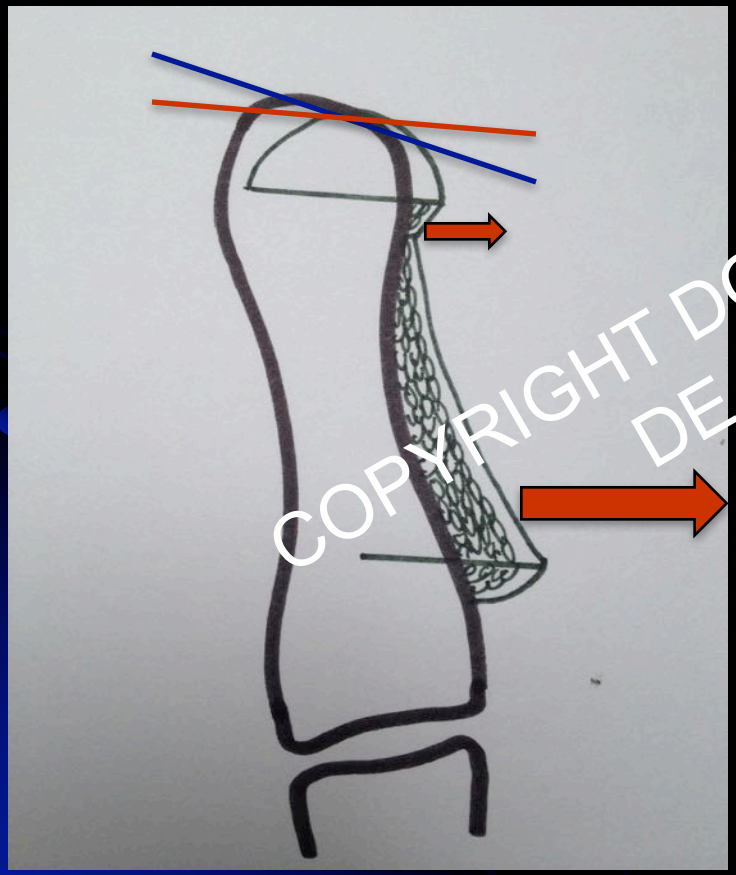


Advantages of the Scarf osteotomy

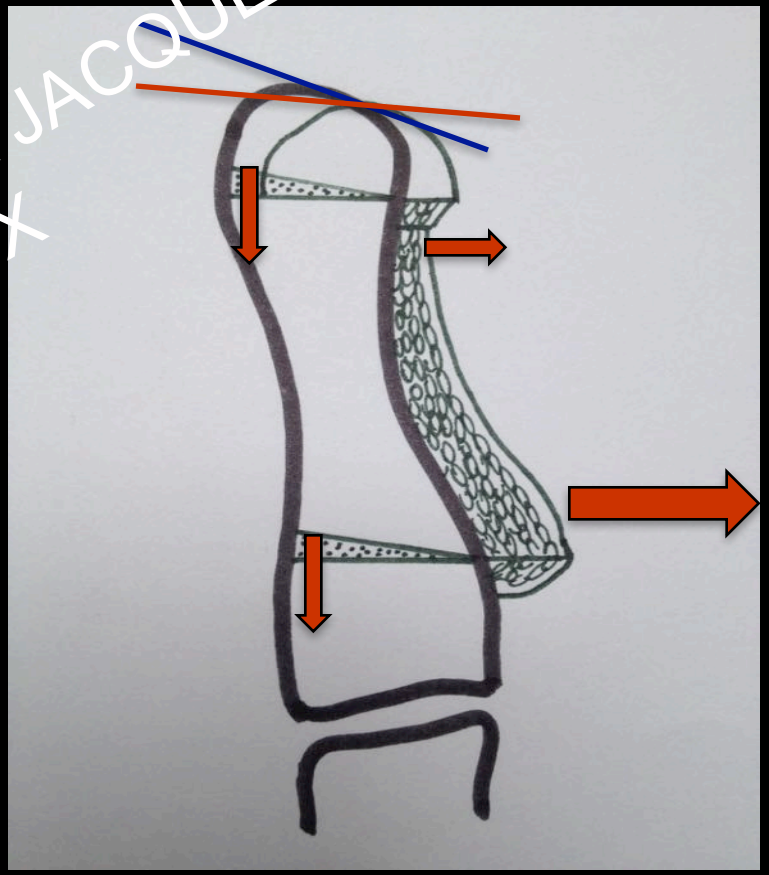
Deformity correction in different planes:

4° DMAA CORRECTION

Rotation

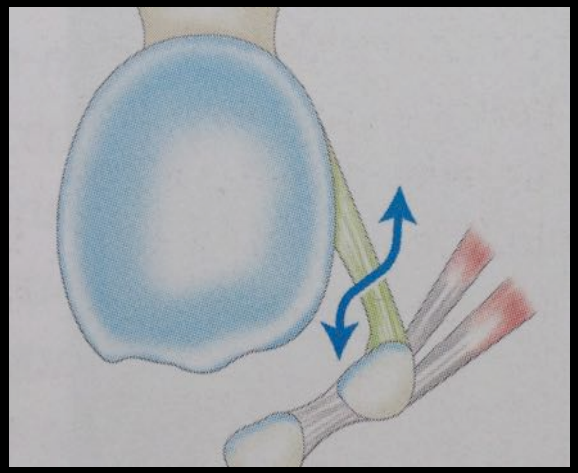


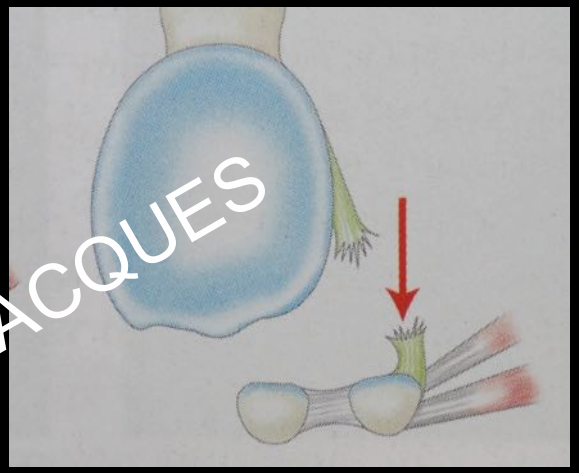
Medial closing wedge

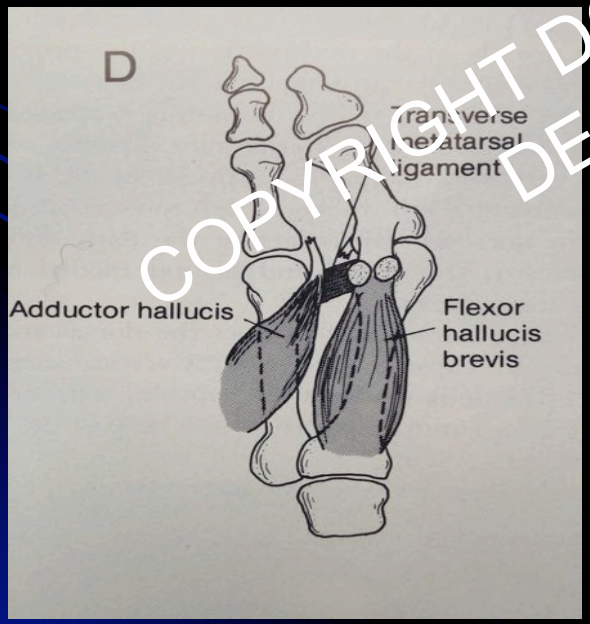


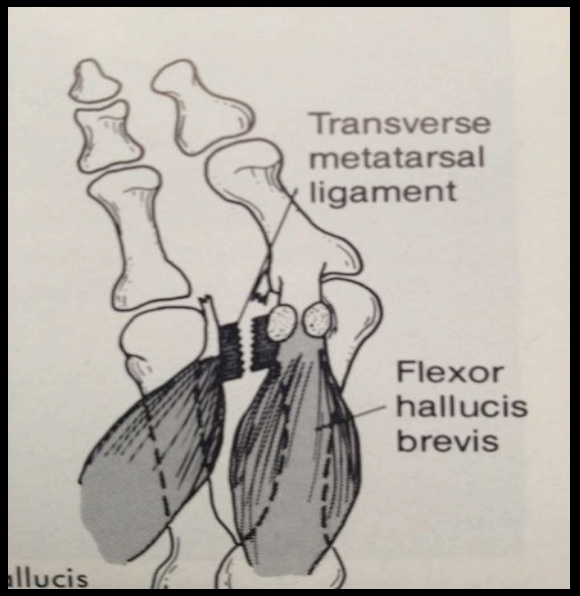
SURGICAL TECHNIQUE

Lateral soft tissue release



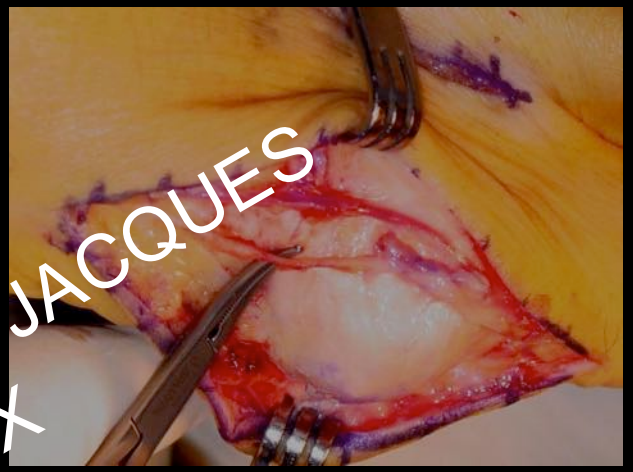


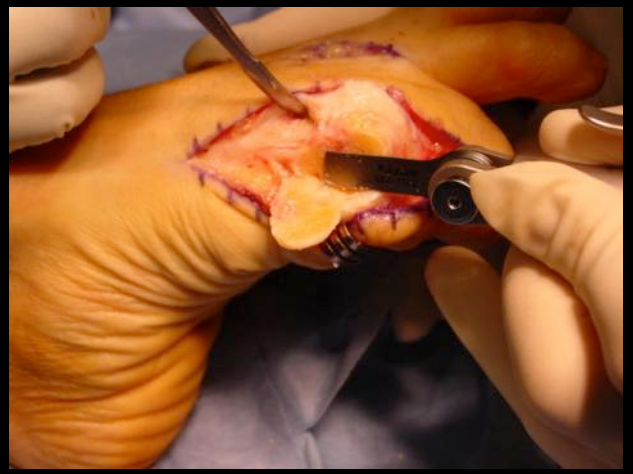




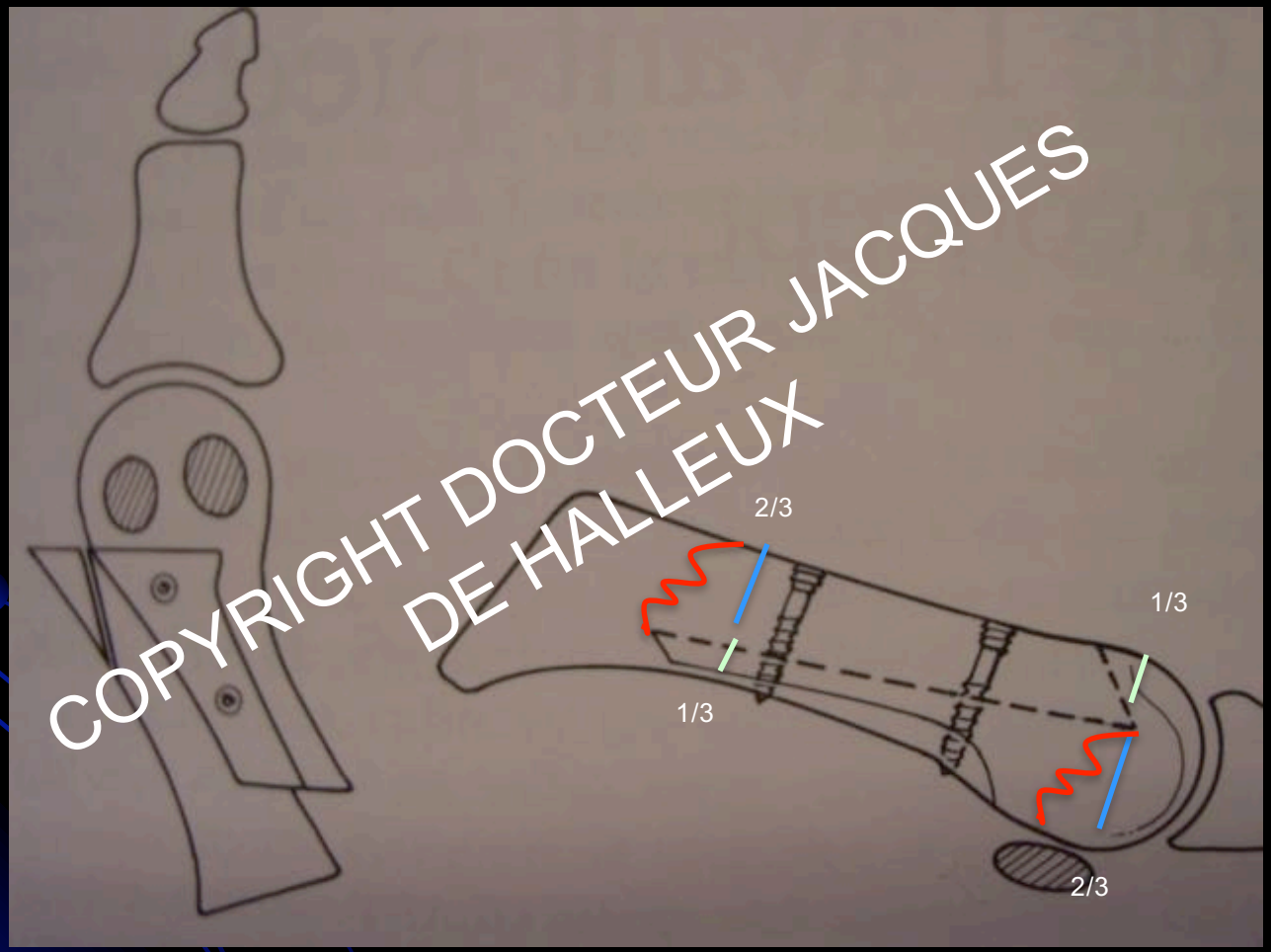
SURGICAL TECHNIQUE

Scarf Osteotomy

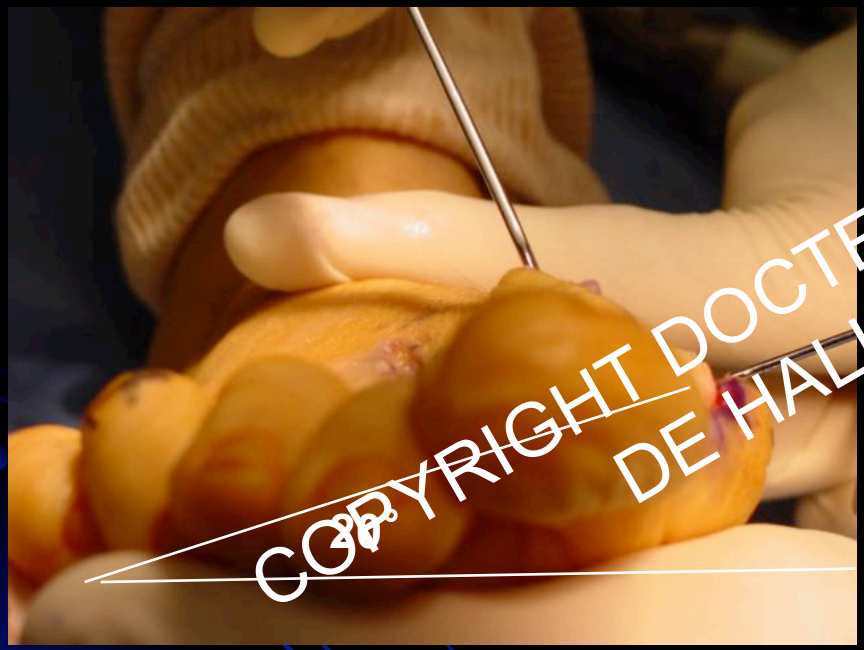




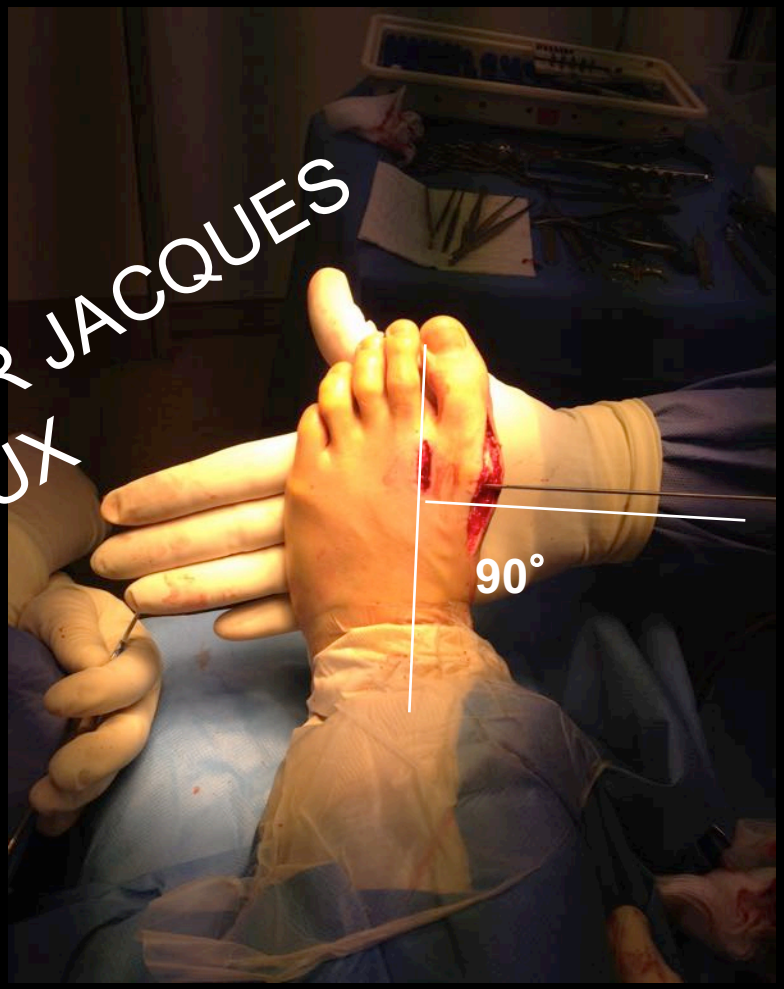
SCARF OSTEOTOMY



Kirshner wire : direction of the osteotomy

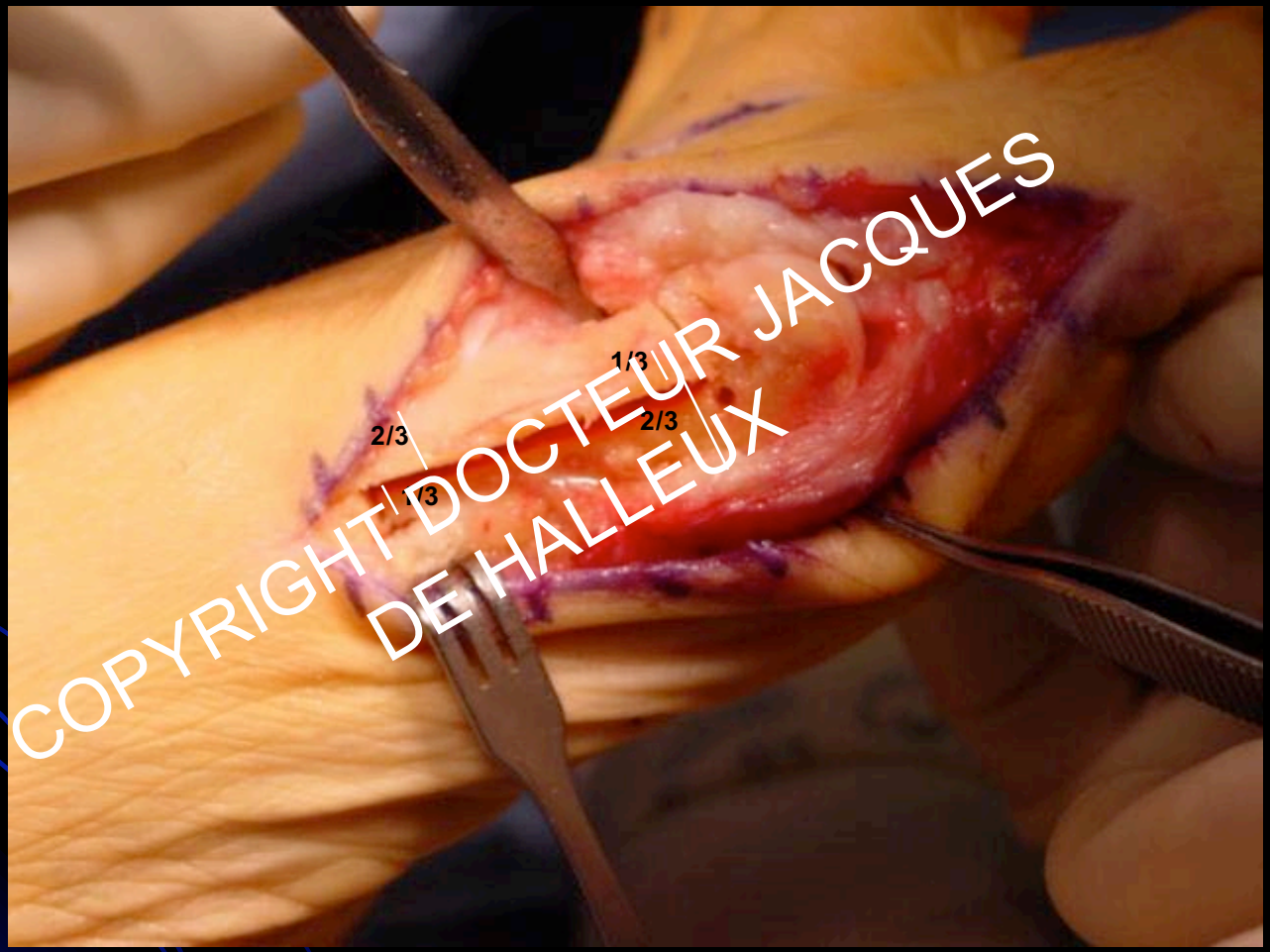


20° plantar

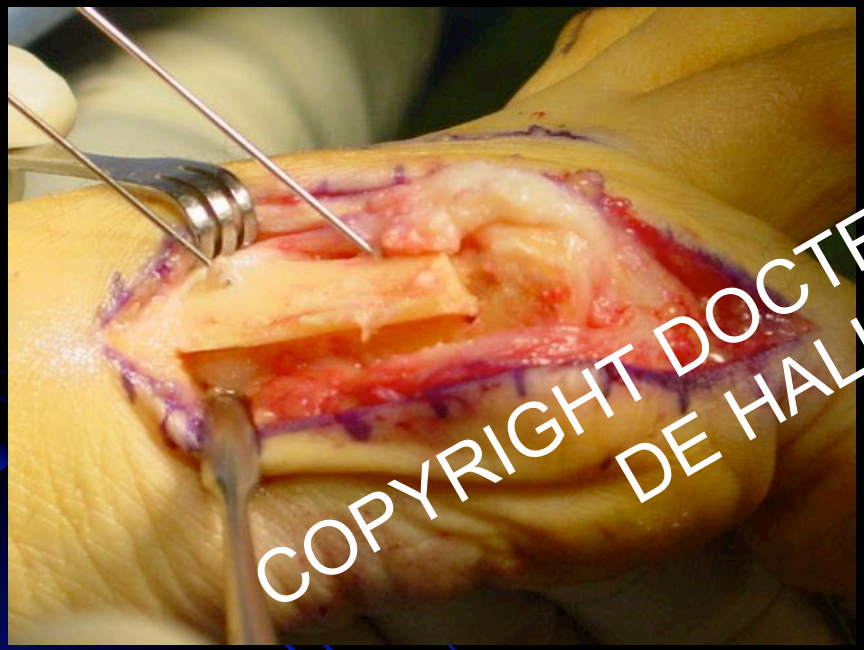


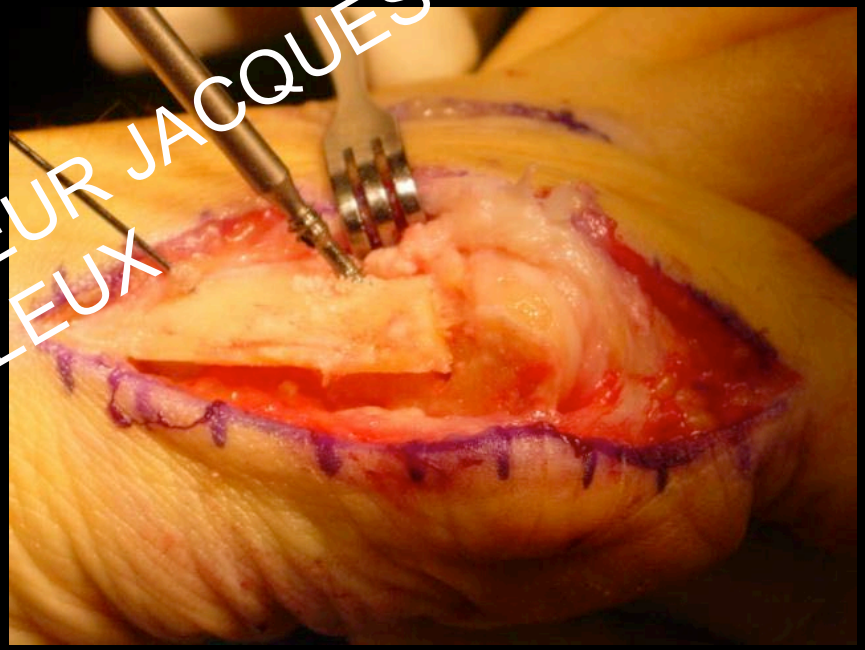
90° _I_ MT2

SCARF OSTEOTOMY

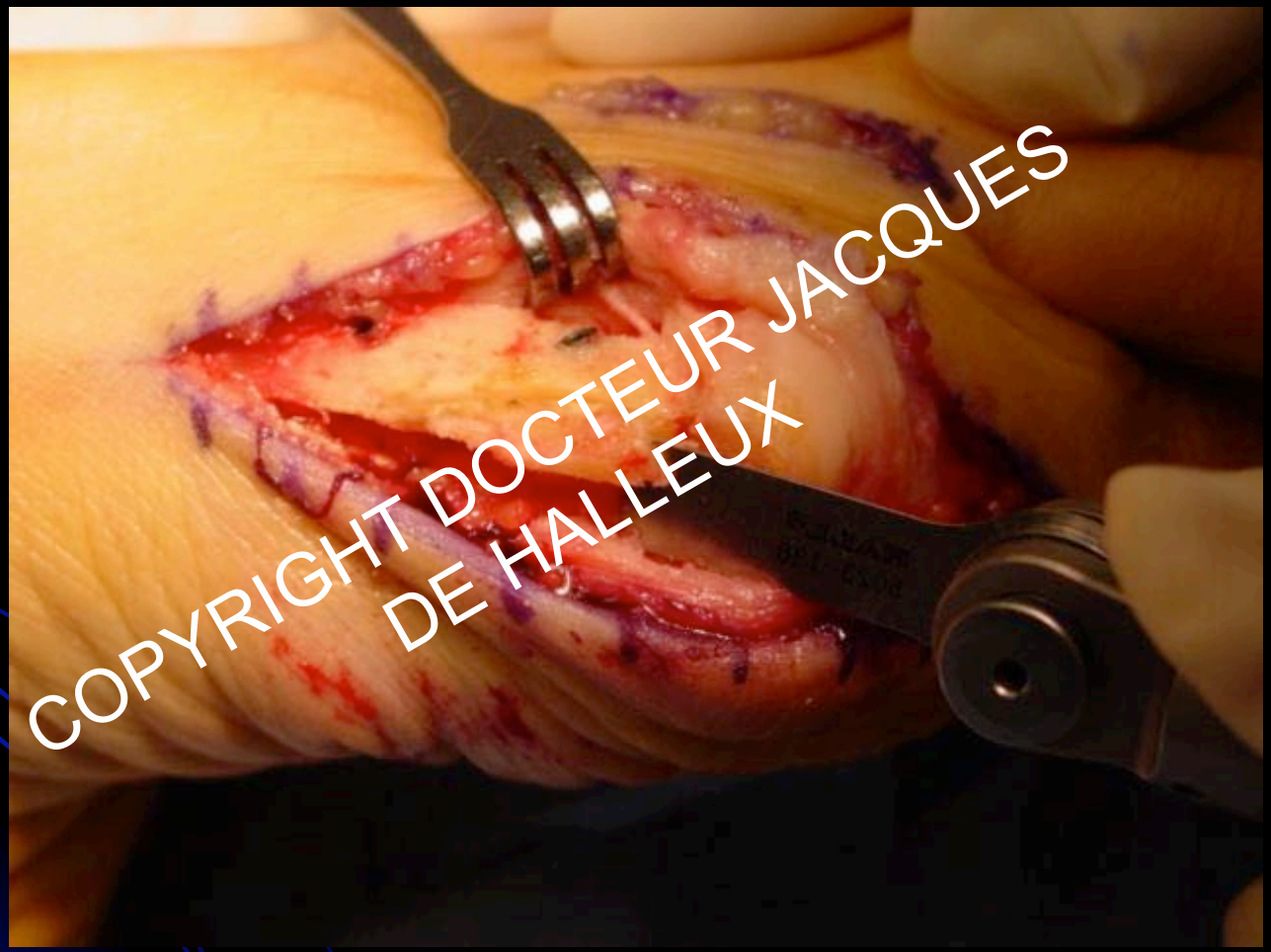


FIXATION

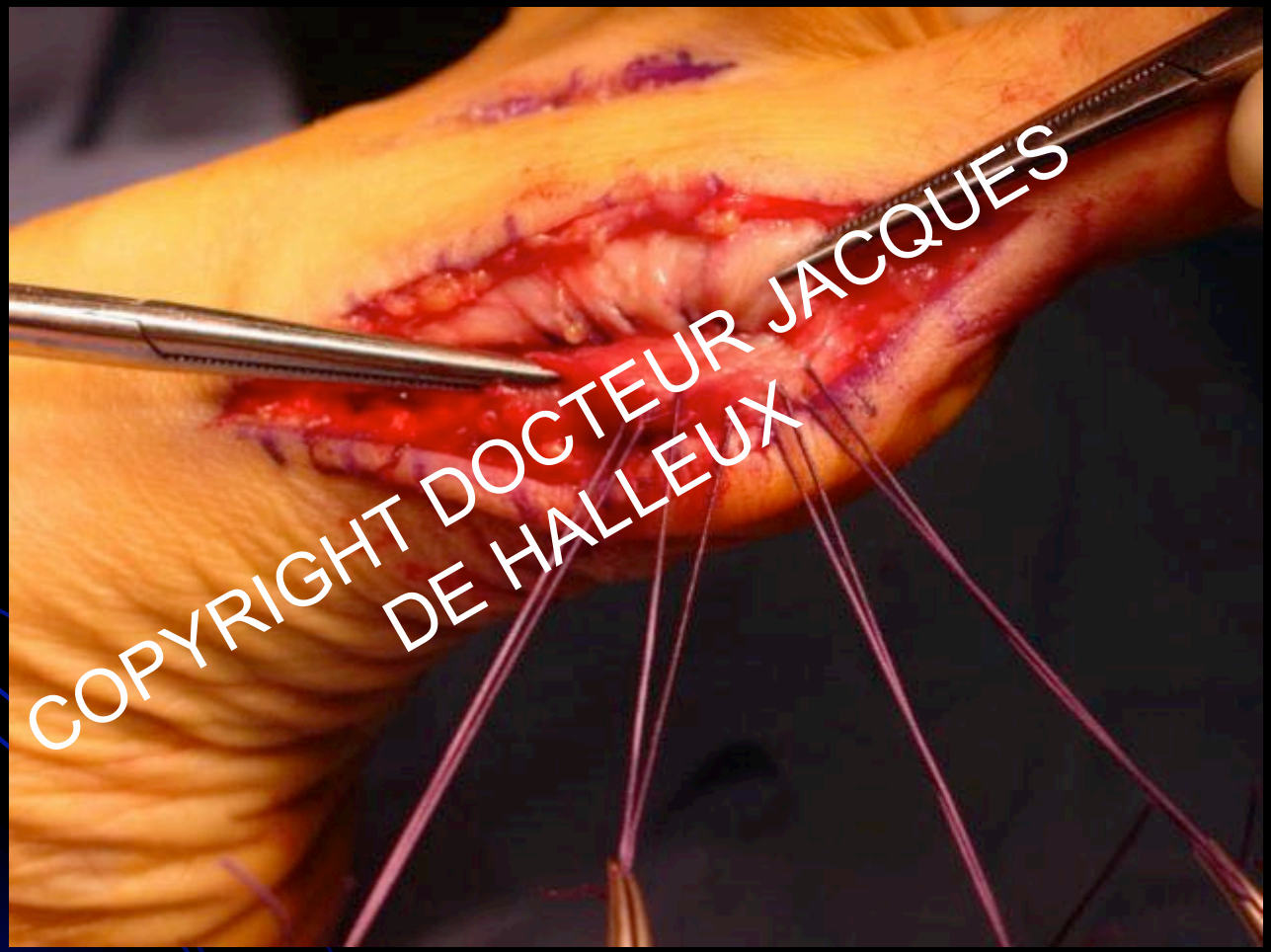




RESECTION PROMINENT PART

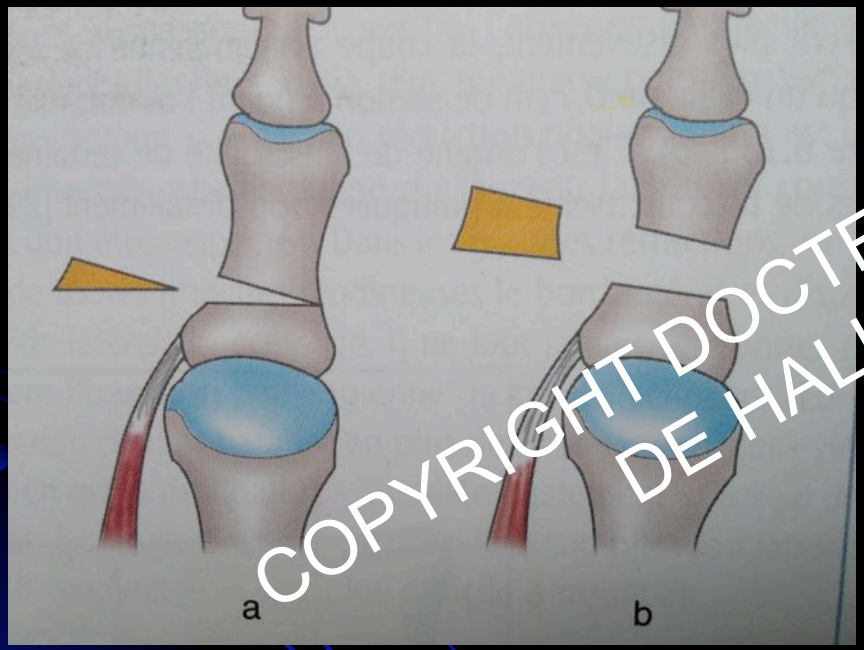


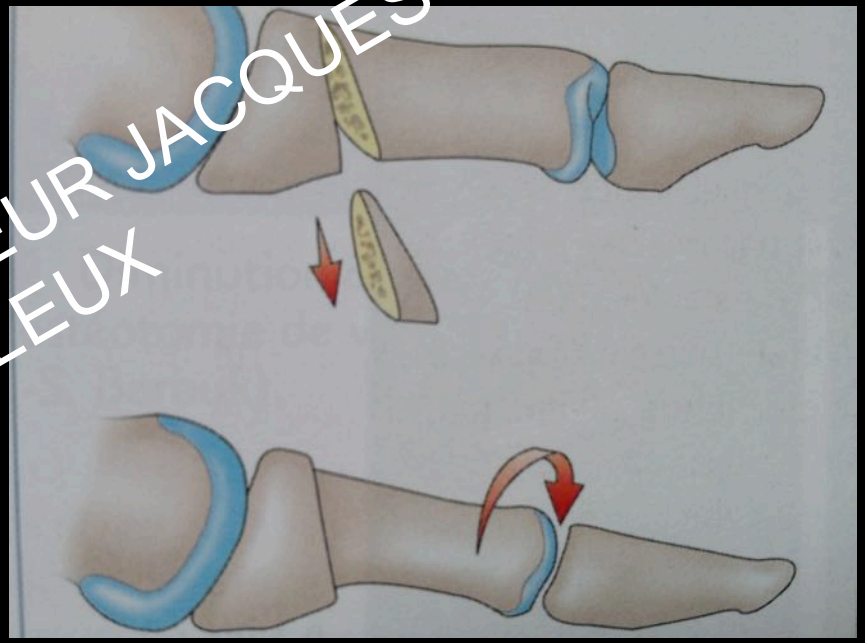
CAPSULORRAPHY



AKIN OSTEOTOMY

BAROUK 90 %
VALTIN 80 %

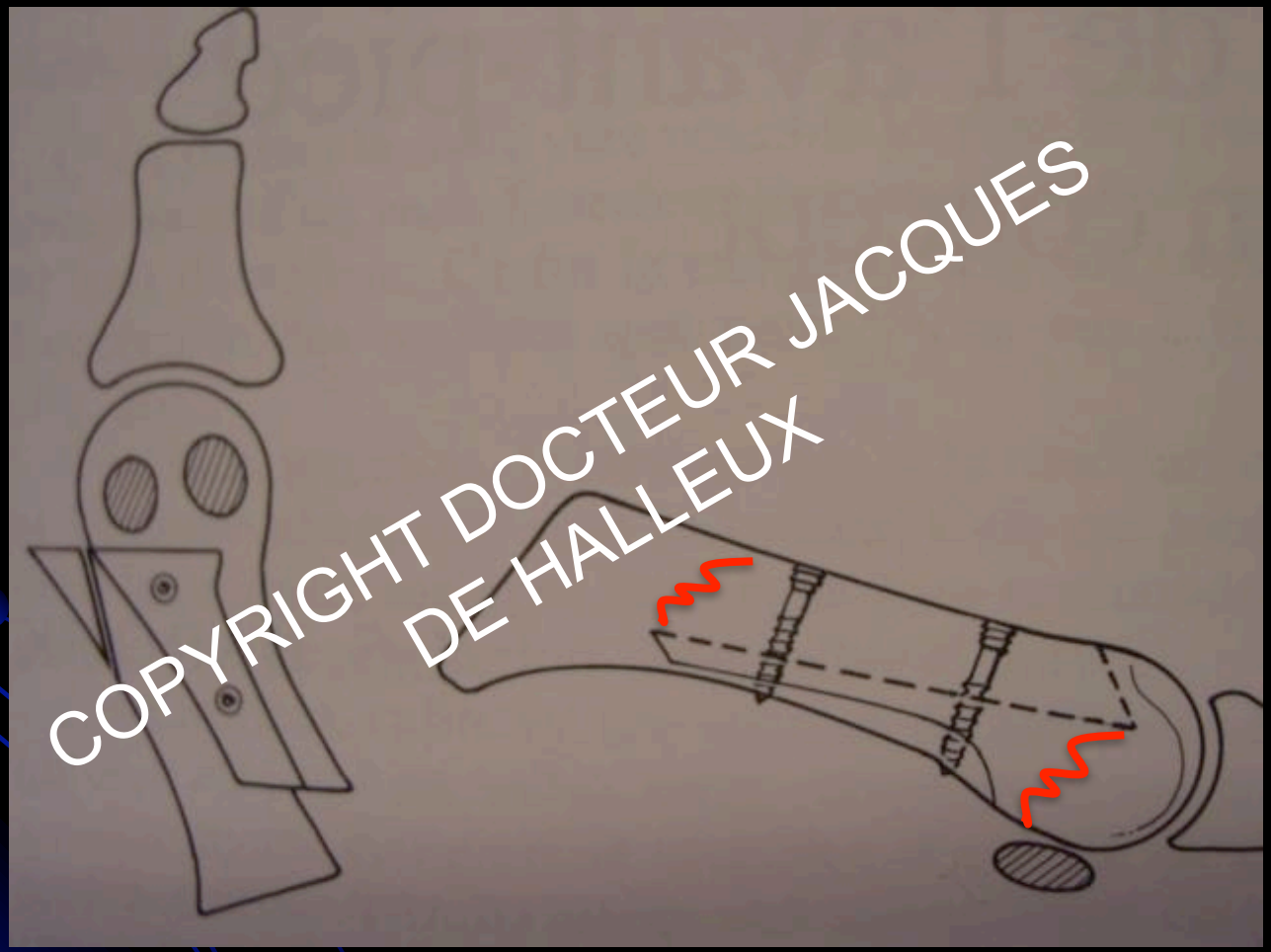




Varisation Shortening Rotation

pictures from: Th Leemrijse, B Valtin, Pathologie du Pied et de la cheville, 2009

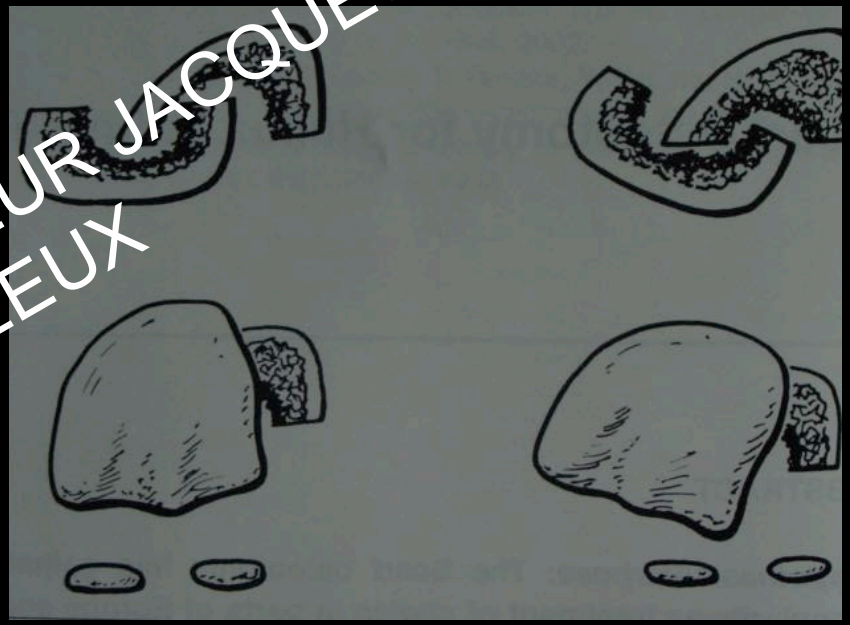
PEROPERATIVE COMPLICATION FRACTURE MT1



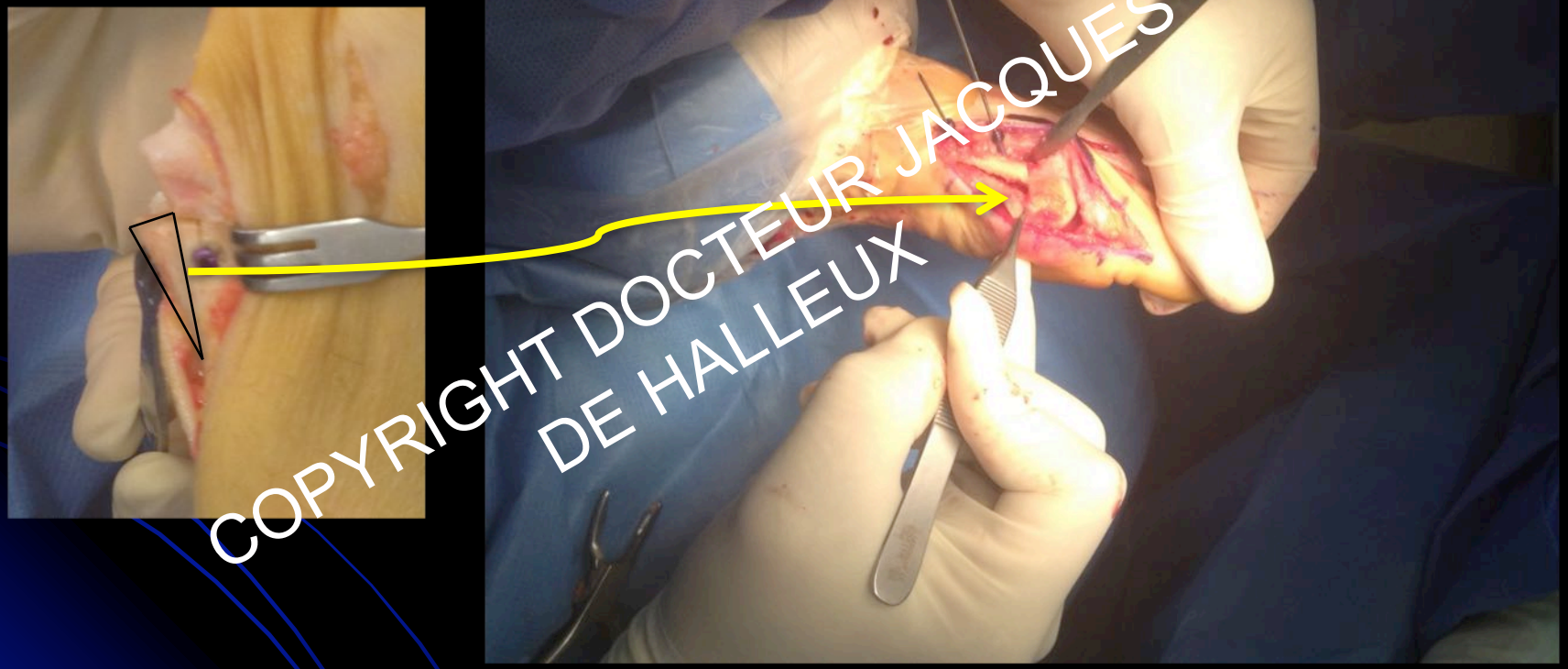
PEROPERATIVE COMPLICATION
Fracture (distal screw)

PEROPERATIVE COMPLICATION « TUILE DE PROVENCE »

- « throughing » causing collapse with or without rotation of the metatarsal



J Chris Coetzee, Scarf osteotomy for hallux valgus : the dark side, F&A international,Jan 2003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DE HALLEUX

CONCLUSION

- Technically demanding procedure that has a large learning curve
- Scarf osteotomy allows :
  - Translation
  - Shortening
  - Lowering
  - Rotation (DMAA)


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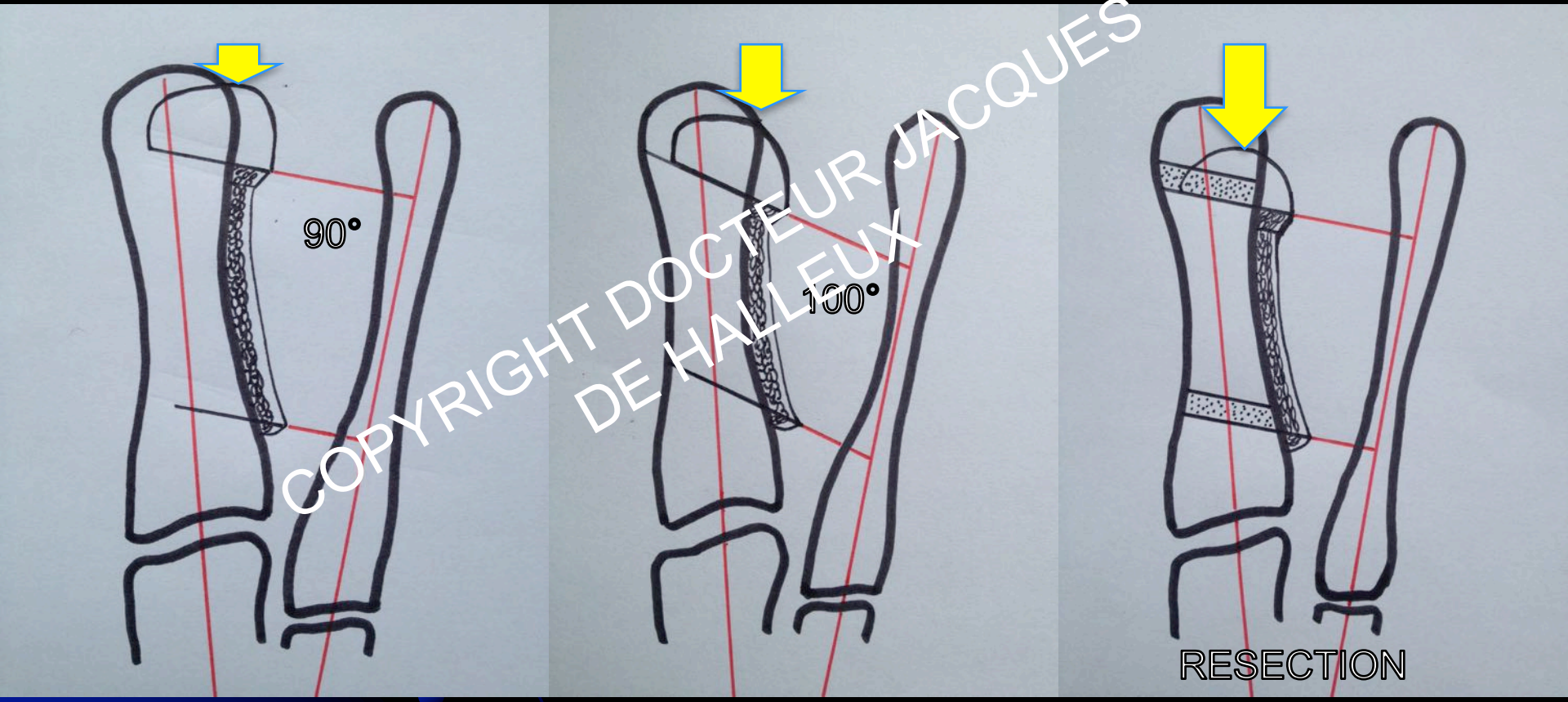
DE HALLEUX

COMPLI - CATIONS	Barouk (Foot Deseases, 1995) n = 682	Weil, (F&A clinics, Sept 2000	Valtin , Leemrij (AFCP, Bordeaux 2000)	Rippstein, (AFCP, Bordeaux, 2000)	Besse, (EFAS, 2001)	Kristen (F&A Intern., March 2002)	Coetzee (F&A intern.Jan 2003)	Smith (F&A, march 2003)
MT #	3,5 %	1,5%			0 à 3 %		10%	Perop=3% Postop 2% (+1 %pin #)
Recurrence HV	« rare »	3 %			3 à 8 %	6 %	25%	
Hallux varus	0,5 %	3 %			0 à 4 %			
Osteonecrosis MT head				2 %	0 à 1 %			
Prominent hardware								
Infection, wound dehiscence			2%			2,1 %	5%	
Superficial nerve injury								
Joint stiffness					3 %	4,4 %		
Suddëck	« Idem other forefoot surgery »		1 %					
MT1 displacement or MT1 impaction « throughing »					1 à 2 %	1,5%	65%	

Advantages of the Scarf osteotomy

Deformity correction in different planes:

SHORTENING



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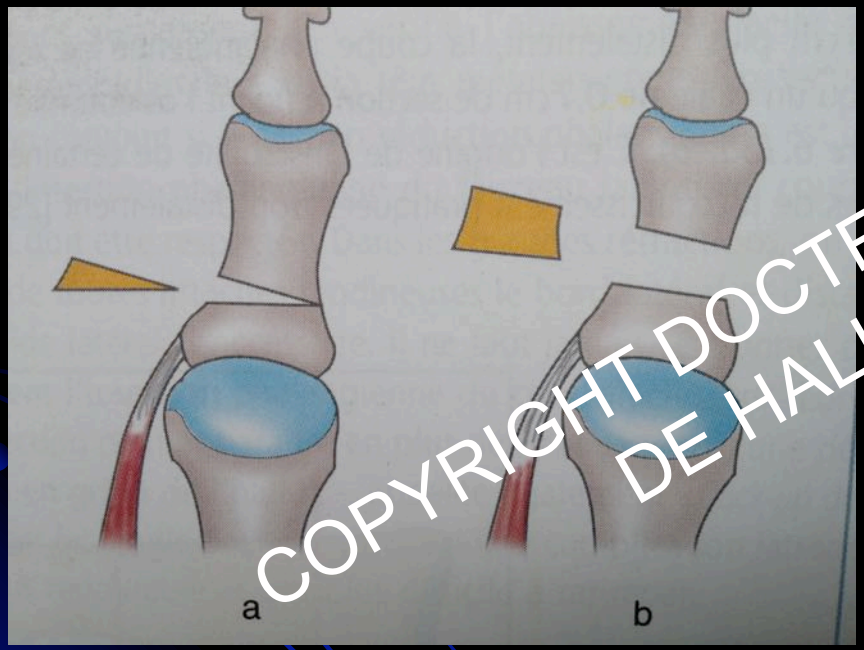

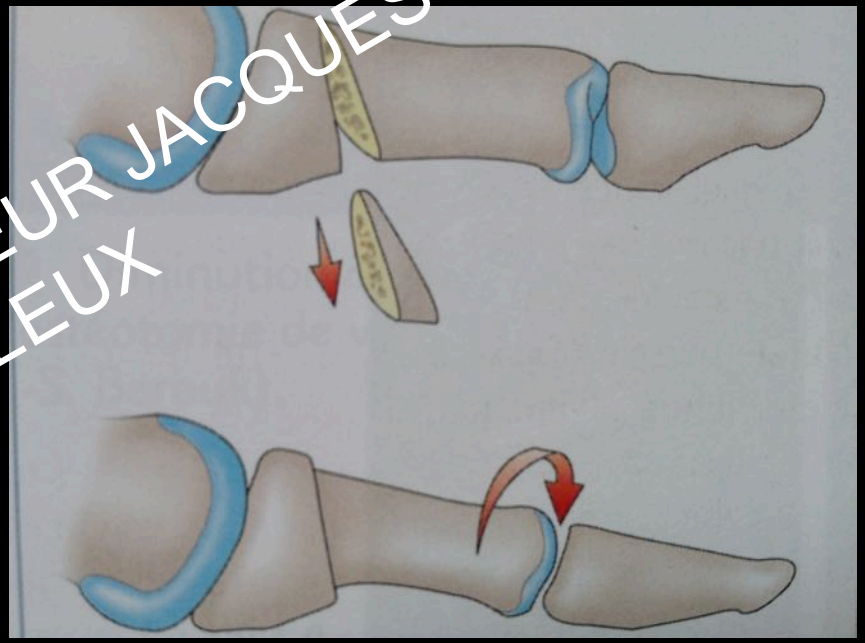

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