



Lat UKA for Post Traumatic Osteoarthritis

Sébastien LUSTIG MD, PhD

Orthopaedic surgery and sport medicine department

Lyon University Hospital, France



Lat UKA have excellent long term survivorship

5- to 16-Year Follow-Up of 54 Consecutive Lateral Unicompartmental Knee Arthroplasties With a Fixed-All Polyethylene Bearing

Sebastien Lustig, MD, PhD,*† Ahmed Elguindy, MD,*‡
Elvire Servien, MD, PhD,*‡ Camdon Fary, FRACS,§ Edouard Munini, MD,*
Guillaume Demey, MD,*† and Philippe Neyret, MD*†



Contents lists available at ScienceDirect

The Knee

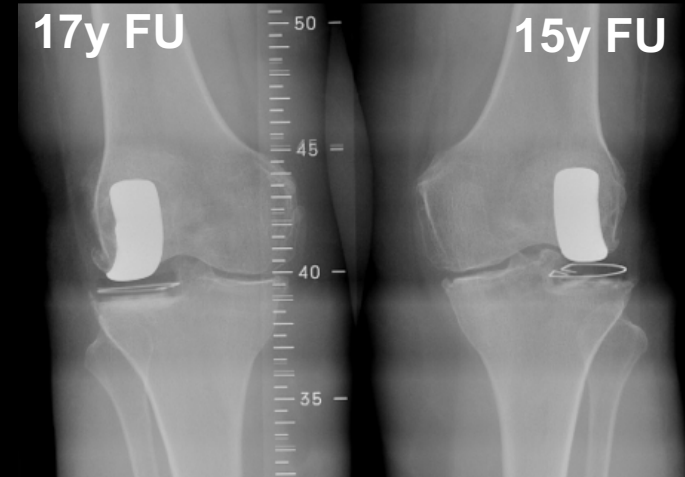


Progression of medial osteoarthritis and long term results of lateral unicompartmental arthroplasty: 10 to 18 year follow-up of 54 consecutive implants

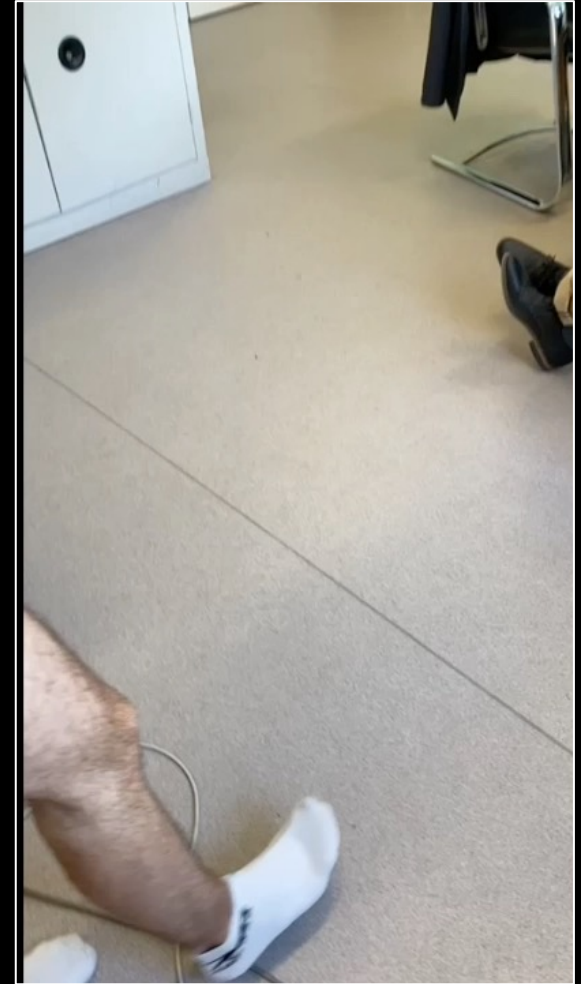
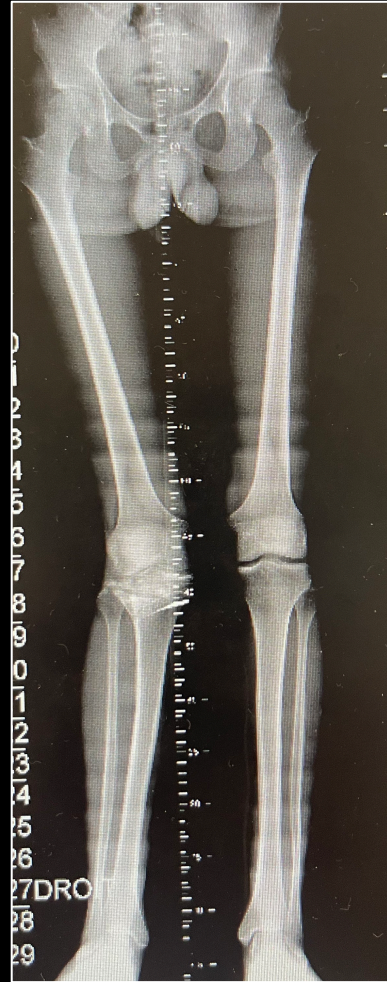
Sébastien Lustig^{a,*}, Timothy Lording^{a,b}, Florent Frank^a, Caroline Debette^a, Elvire Servien^a, Philippe Neyret^a

High Survival Rate and Very Low Wear of Lateral Unicompartmental Arthroplasty at Long Term A Case Series of 54 Cases at a Mean Follow-Up of 17 Years

Etienne Deroche, MD ^a, Cécile Batailler, MD ^{a,*}, Timothy Lording, MBBS, FRACS ^b,
Philippe Neyret, PhD, MD ^a, Elvire Servien, PhD, MD ^a, Sébastien Lustig, PhD, MD ^a

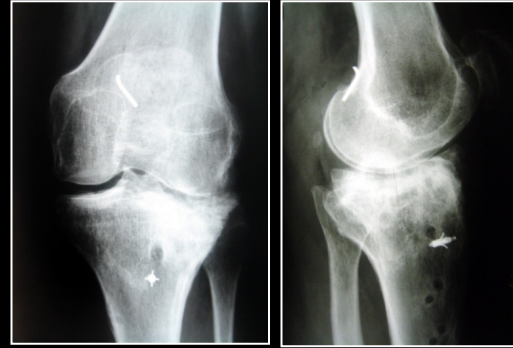


The case 18ys old ...

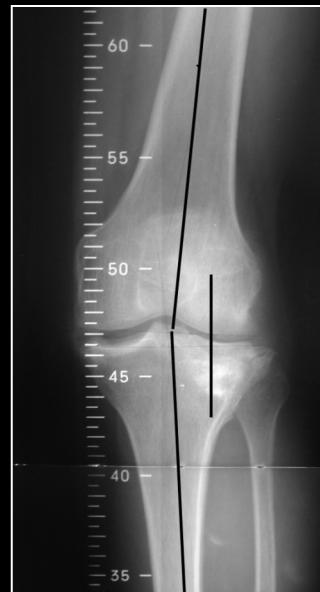


Post-traumatic OA

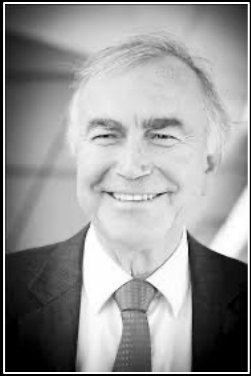
- Lateral tibial plateau++
- Young patients
- Bone quality?
- Expected functional result++



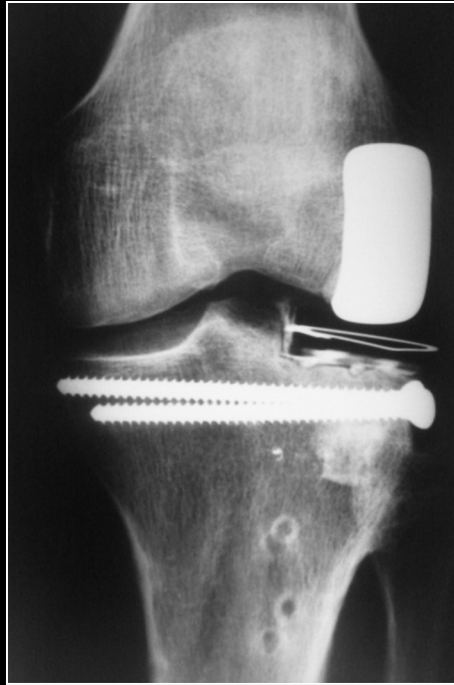
31 y 105kgs ...



**YOU WILL NEVER
KNOW YOUR LIMITS
UNLESS YOU PUSH
YOURSELF TO THEM**



6 months FU



9 1/2 ys FU



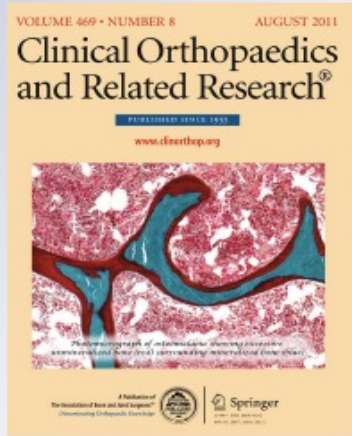
*Lateral Unicompartmental Knee
Arthroplasty Relieves Pain and Improves
Function in Posttraumatic Osteoarthritis*

*Sebastien Lustig, Sebastien Parratte,
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Argenson & Philippe Neyret*

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SYMPOSIUM: PAPERS PRESENTED AT THE ANNUAL MEETINGS OF THE KNEE SOCIETY

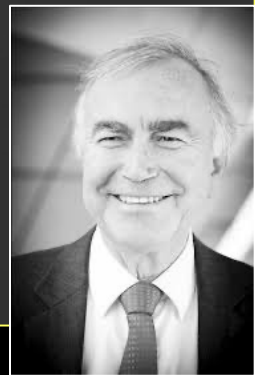
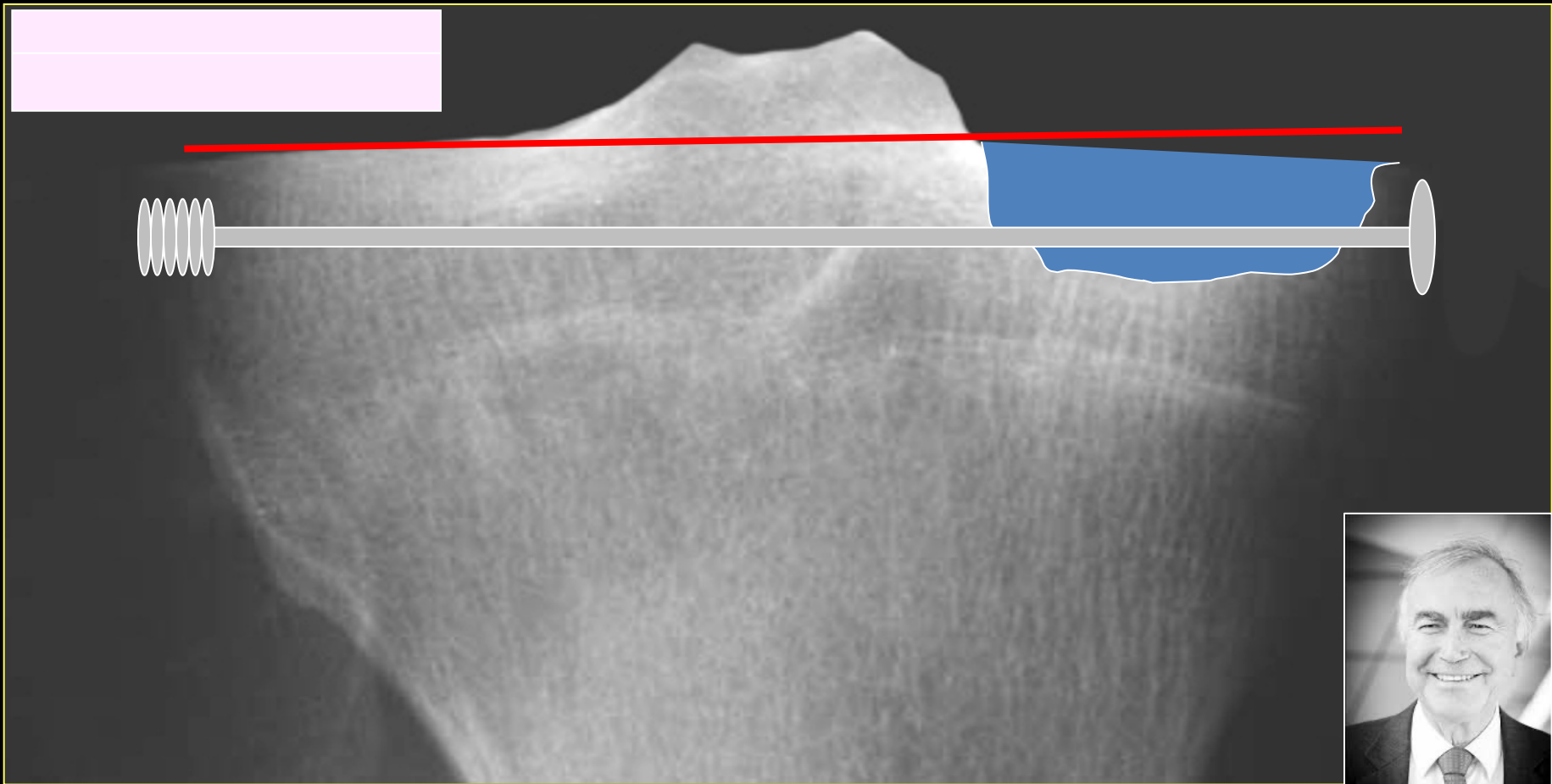
**Lateral Unicompartmental Knee Arthroplasty Relieves Pain
and Improves Function in Posttraumatic Osteoarthritis**

Sebastien Lustig MD, PhD, Sebastien Parratte MD, PhD,
Robert A. Magnussen MD, Jean-Noel Argenson MD,
Philippe Neyret MD











	Post-traumatic group (n = 18) ^a
Age at surgery (year)	54.1 ±17.8 [25 – 85]
Follow-up (year)	11.4 ±7.2 [3.7 – 21.2]
Sex (female)	12/18 (66.7%)
BMI	25.6 ±3.2 [19.5 – 30.6]
ASA score	1.4 ±0.7 [1 – 3]
OA stage (Ahlback)	2.1 ±0.6 [1 – 4]
Preoperative mFTA (°)	186.6 ±5.4 [177 – 195]
Preoperative IKS score:	
- Knee	45.6 ±16.3 [19 – 73]
- Function	50 ±14.3 [29 – 80]
Delay with the tibial plateau fracture (year)	4.1 ±3.7 [0.41 – 11.5]
Initial treatment:	
- Non-operatively (cast)	6/18 (33.3%)
- Open reduction and internal fixation	12/18 (66.7%)

**YOUNG
SEVERE VALGUS DEFORMITY**

***Delay fracture / lat UKA is short
Previous surgery***



134 Lateral UKA performed
between May 1990 and April 2017

Matching process

18 Lateral post-traumatic UKA
(Post-traumatic group)

36 Lateral UKA
(Control group)

Knee Surgery, Sports Traumatology, Arthroscopy

<https://doi.org/10.1007/s00167-020-06359-w>

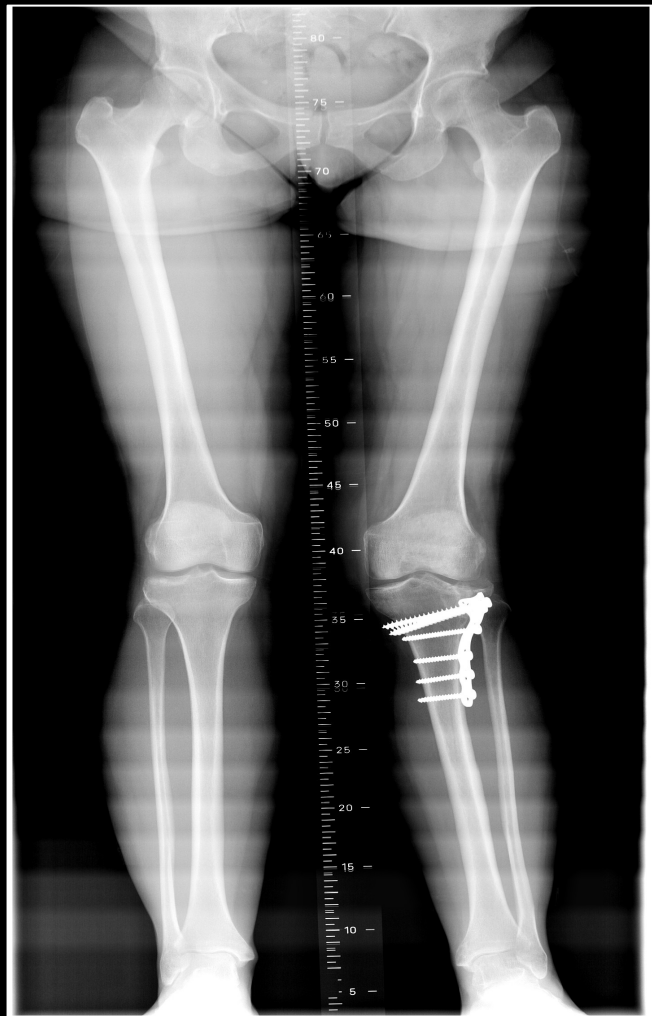
KNEE



Lateral unicompartmental knee arthroplasty is a safe procedure for post-traumatic osteoarthritis after lateral tibial plateau fracture: a case–control study at 10-year follow-up

Axel Schmidt¹ · Thomas Barnavon¹ · Timothy Lording² · Elliot Sappey-Marinier¹ · Cécile Batailler¹ · Elvire Servien^{1,3} · Sébastien Lustig^{1,4}

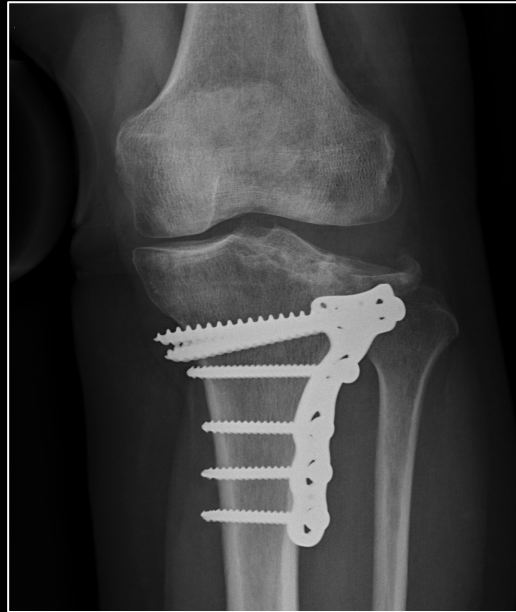
	Post-traumatic group (n = 18) ^a	Control group (n = 36) ^a	p Value
Age at surgery (year)	54.1 ±17.8 [25 – 85]	59.9 ±4.6 [49 – 66]	0.06
Follow-up (year)	11.4 ±7.2 [3.7 – 21.2]	9.4 ±7.1 [3.1 – 23]	0.4
Sex (female)	12/18 (66.7%)	26/36 (72.2%)	0.7
BMI	25.6 ±3.2 [19.5 – 30.6]	25.5 ±4.3 [16 – 33.9]	0.8
ASA score	1.4 ±0.7 [1 – 3]	1.3 ±0.5 [1 – 3]	0.8
OA stage (Ahlback)	2.1 ±0.6 [1 – 4]	2.4 ±0.8 [1 – 4]	0.4
Preoperative mFTA (°)	186.6 ±5.4 [177 – 195]	184.2 ±2.9 [177 – 190]	0.04
Preoperative IKS score:			
- Knee	45.6 ±16.3 [19 – 73]	62.9 ±12.9 [25 – 88]	0.0006
- Function	50 ±14.3 [29 – 80]	66.4 ±16.8 [20 – 90]	0.001
Delay with the tibial plateau fracture (year)	4.1 ±3.7 [0.41 – 16.2]		
Initial treatment:			
- Non-operatively (cast)	6/18 (33.3%)		
- Open reduction and internal fixation	12/18 (66.7%)		



AFTm = 192°

AFm = 93°

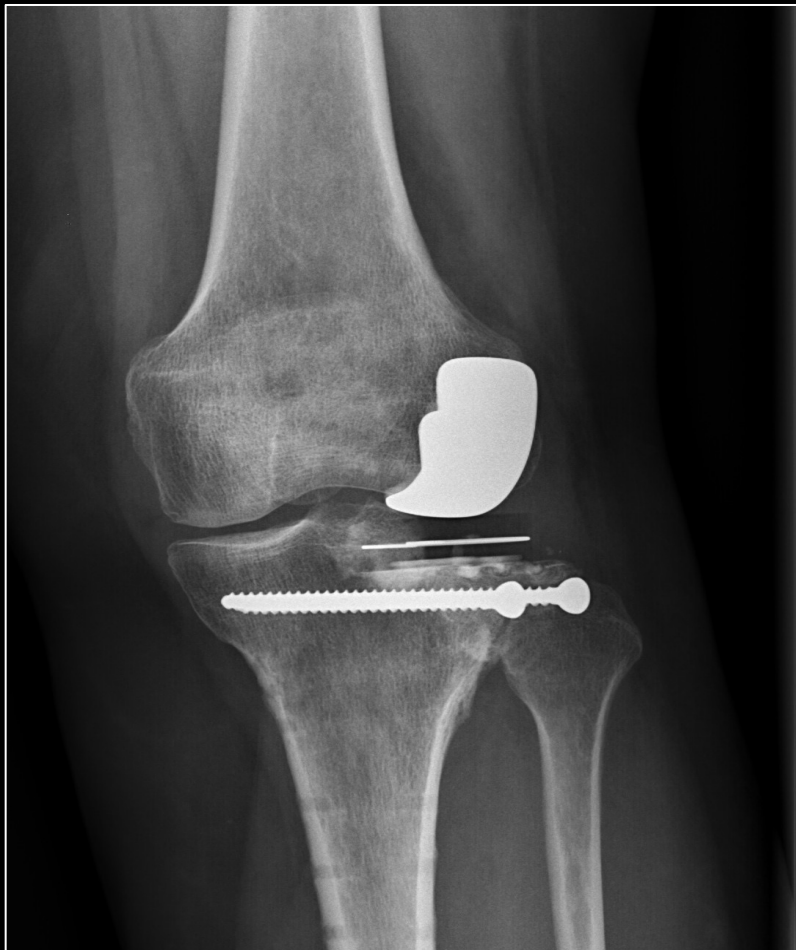
ATm = 98°



varus



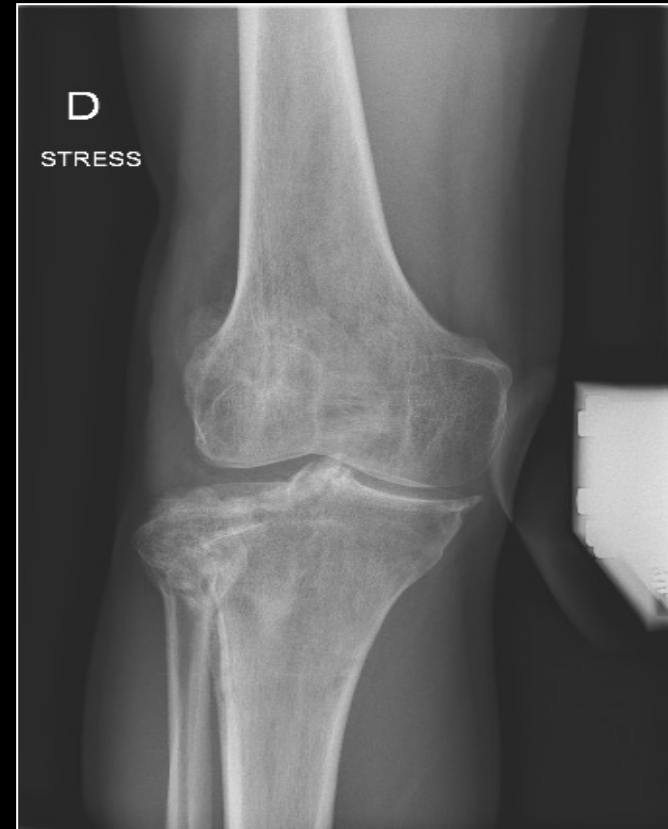
valgus



Acknowledgments Dr Cantin



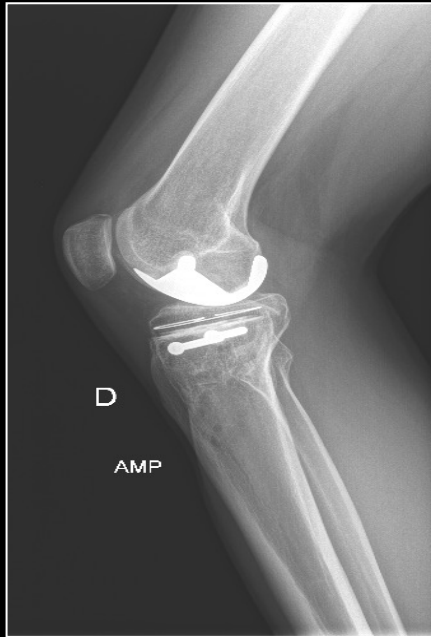
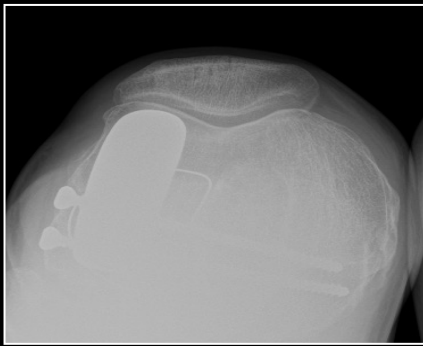
Stress X Rays



TDM after hardware removal



Last FU



Acknowledgment Dr Reynaud

AFTm = 193°

AFm = 99°

ATm = 90°



varus



valgus



Acknowledgment Dr Peltier



134 Lateral UKA performed
between May 1990 and April 2017

Matching process

18 Lateral post-traumatic UKA
(Post-traumatic group)

36 Lateral UKA
(Control group)

3/18 (16.7%) revision surgery:
- PE wear (1)
- Impingement with tibial spines (1)
- Medial OA (1)

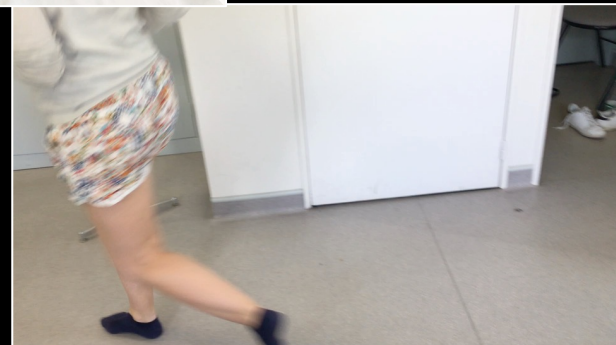
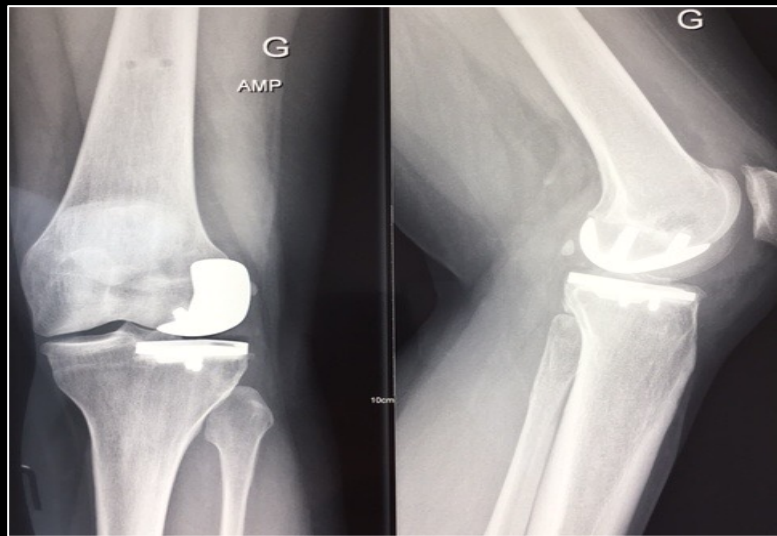
15 (83.3%) Survival prosthesis
at 11.4 years mean follow-up

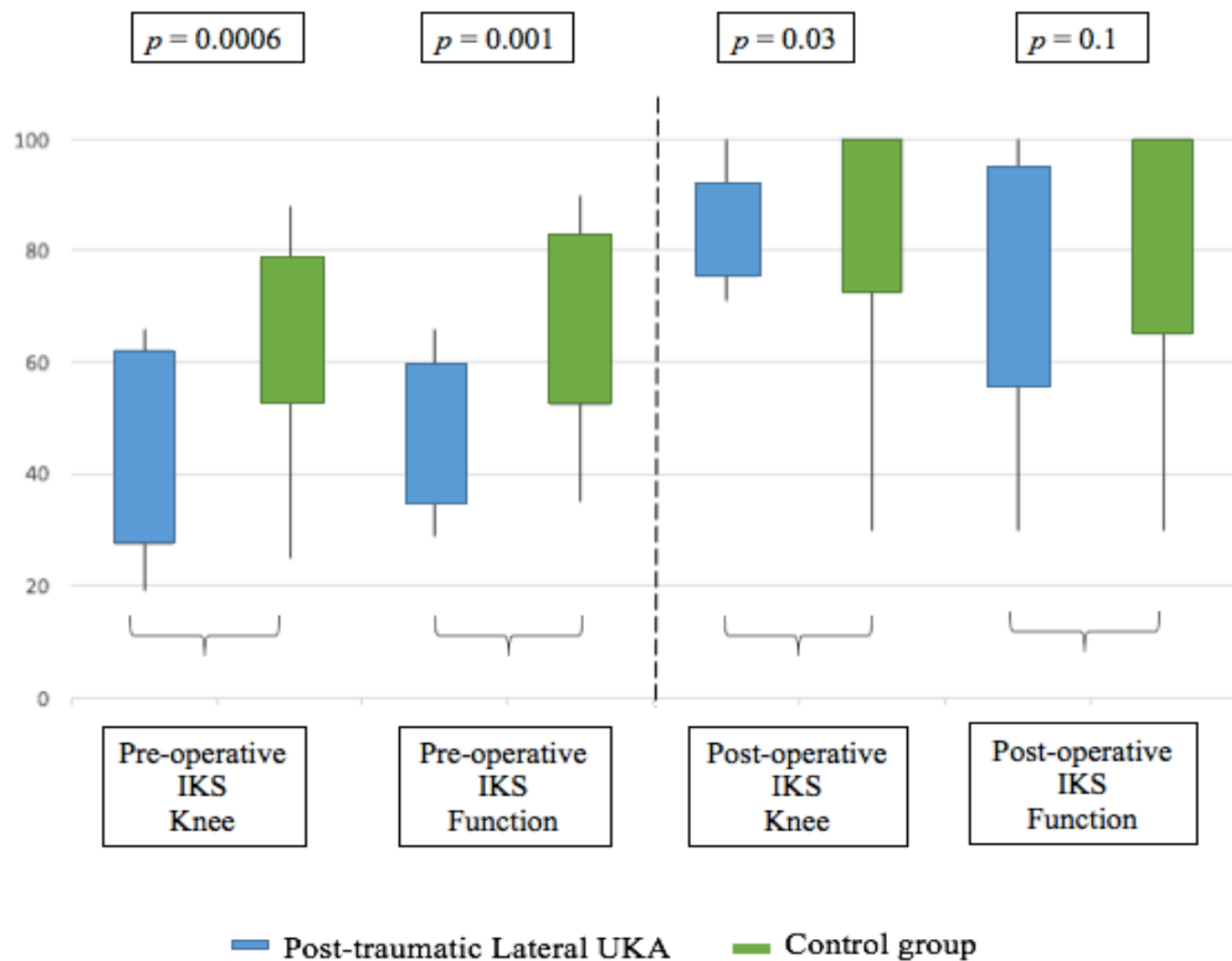
Etiologies of OA:
- Post lateral menisectomy : 11/36 (30.6%)
- Essential OA : 25/36 (69.4%)

7/36 (19.4%) revision surgery:
- Progression of medial OA (4)
- Aseptic loosening (1)
- Patellofemoral OA (1)
- Femoral implant malpositioning (1)

29 (80.6%) Survival prosthesis
at 9.4 years mean follow-up

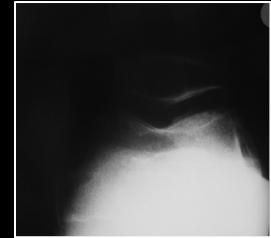
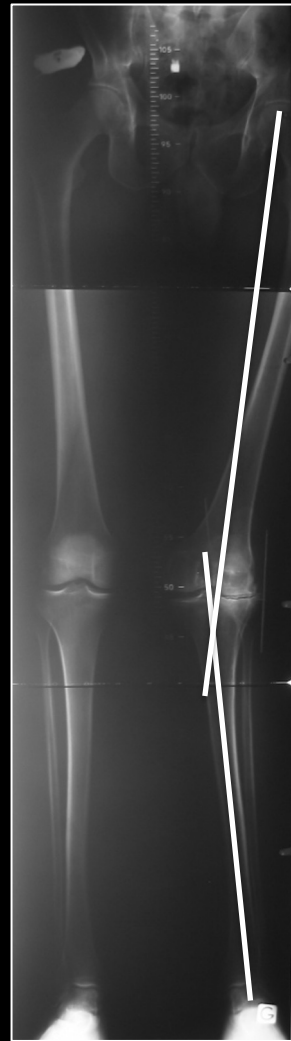
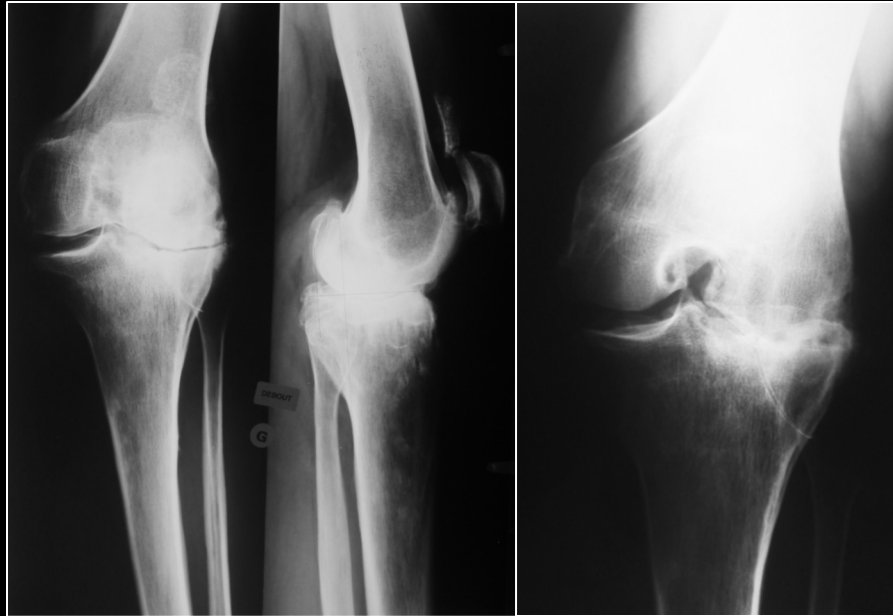
2 months FU

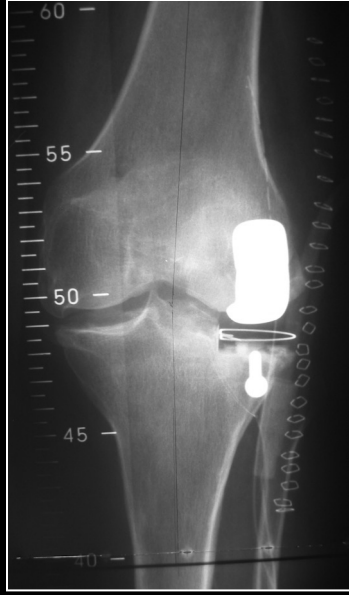




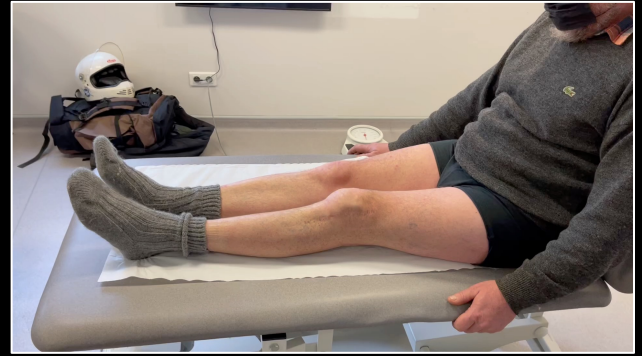
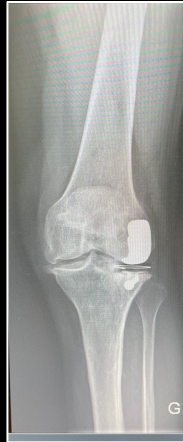
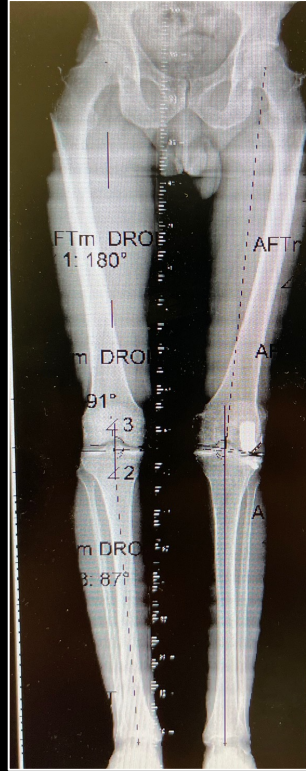
LONG TERM ?

38y old, 14° valgus...

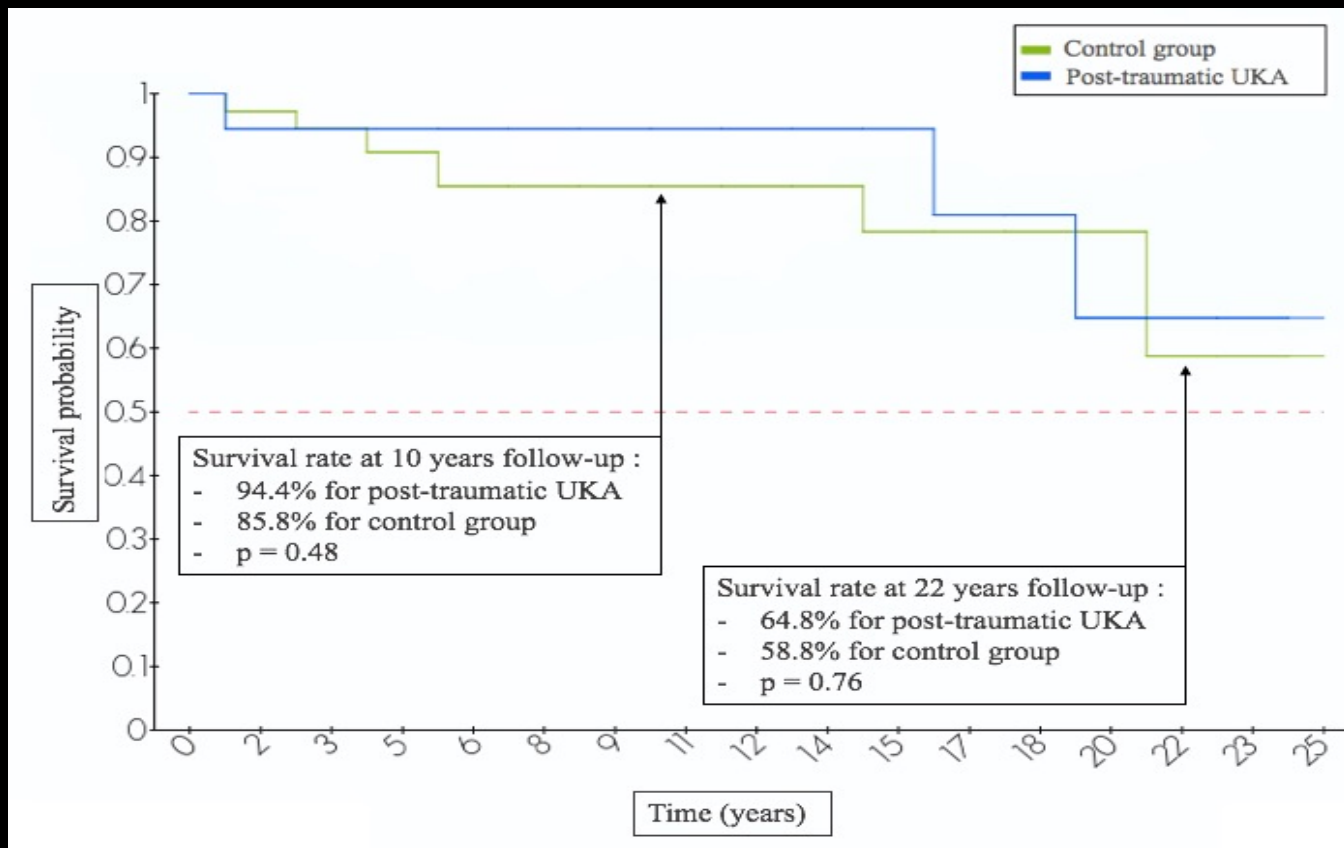




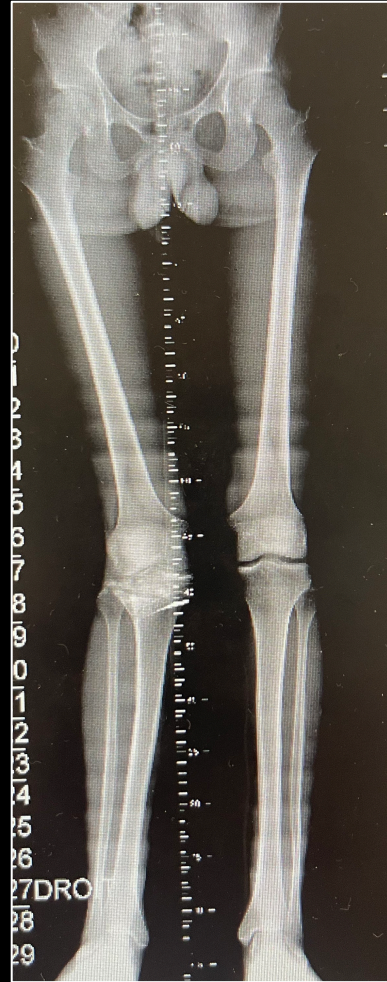
15y later (53y old)



Survivorship



The solution 18ys old ...



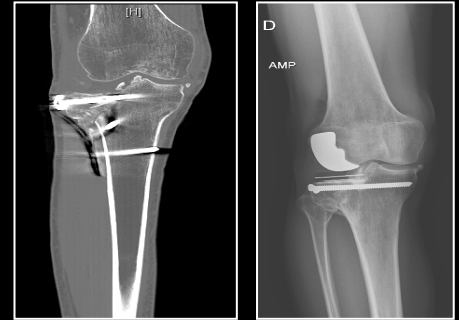
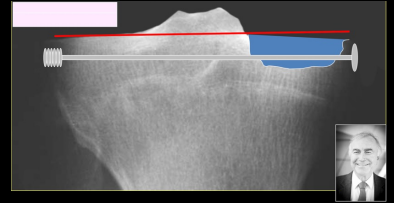
5y FU – 23ys Old



Take Home Message

Lat UKA for Post Traumatic OA

- Challenging surgery
- Excellent functional outcome
- Similar survivorship to lat UKA for primary OA



Thank You

sebastien.lustig@gmail.com