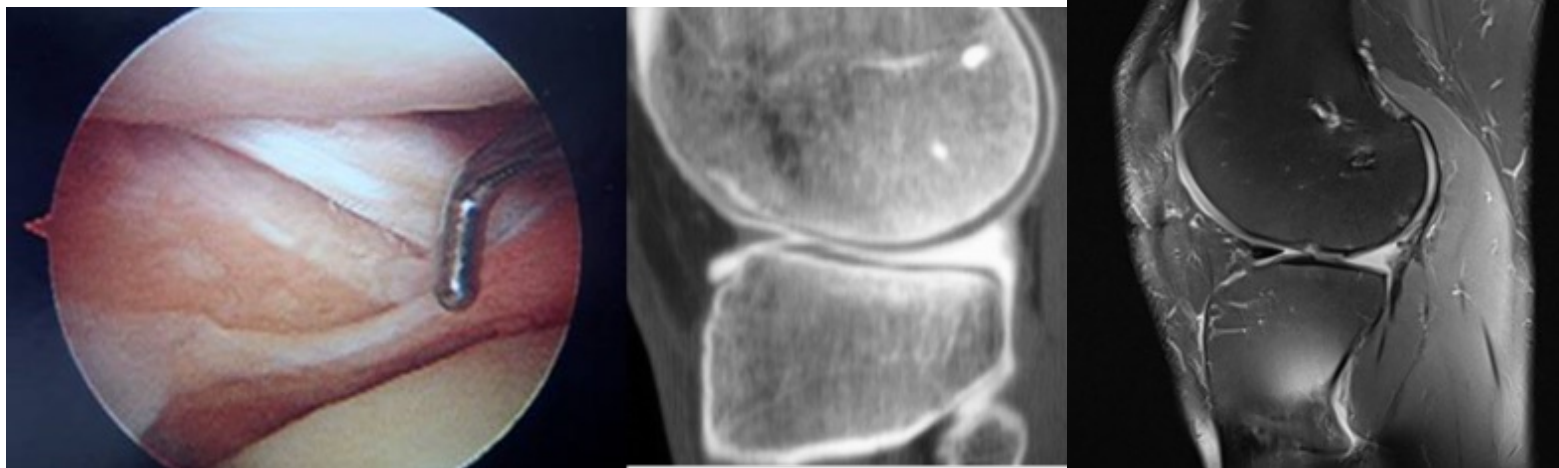


MENISCAL ALLOGRAFTS AND SCAFFOLDS IN A VALGUS KNEE

Nicolas Pujol
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France
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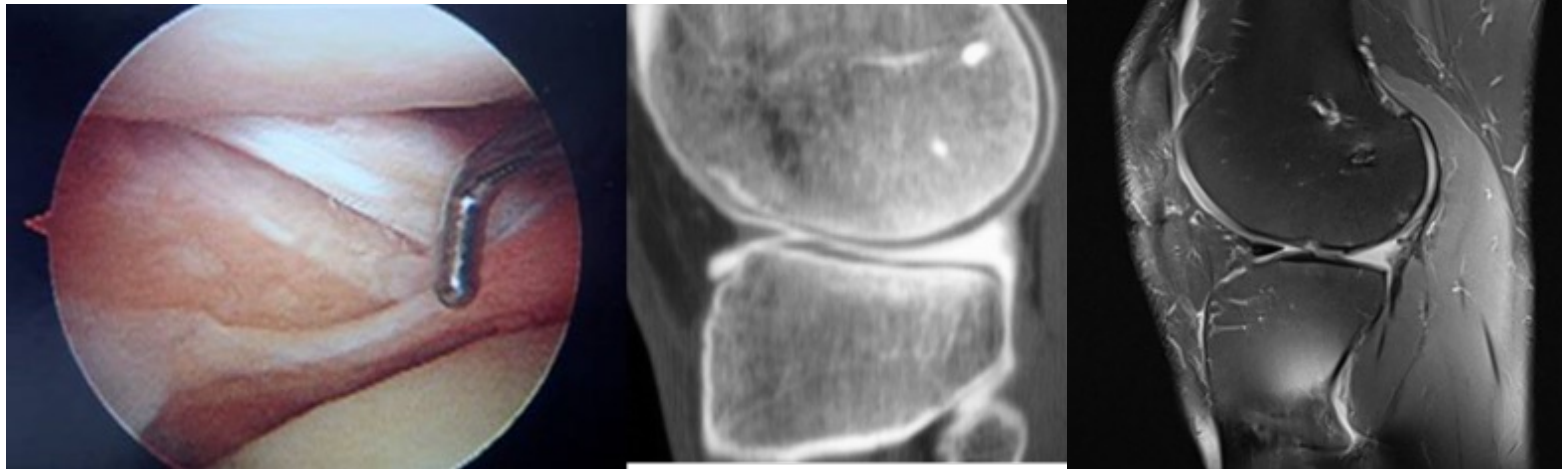
(Good) Indications for MAT: RARE



- Post-meniscectomized knee syndrom
- Chronic > 1 y
- Young Patient
- Favourable axis
- Stable or stabilized
- Without major chondral lesions++



(Good) Indications for MAT: RARE



- Post-meniscectomized knee syndrom
- Chronic > 1 y
- Young Patient
- **Favourable axis ? Or not?**
- Stable or stabilized
- Without major chondral lesions++

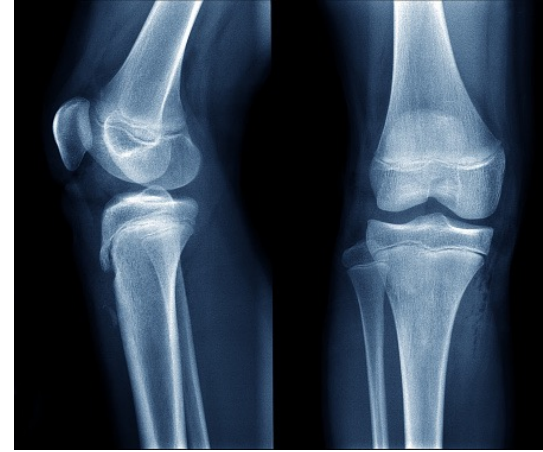


Clinical cases

- Various cases
- To better understand the indications

Any specificities in a valgus knee? Example 1

- Example of a young girl, 13 y
- BMI 28
- Lateral meniscectomy 6 months ago
- Clinical examination:
 - Full ROM
 - Valgus 5°
 - No pain
 - Daily activities OK



Any Indication for a preventive meniscal allograft transplantation? Or A preventive osteotomy? Or an Epiphysiodesis?

NO

Indications:

Only patients with symptoms

Pain, Recurrent effusion

VAS >5

KOOS < 50

Axis: No additional indication



[Getgood A¹](#), et al International Meniscus Reconstruction Experts Forum (IMREF) 2015 Consensus Statement on the Practice of Meniscal Allograft Transplantation. [Am J Sports Med.](#) 2017 ; 45(5) :1195-205.



Preventive allograft?

NO

Indications:

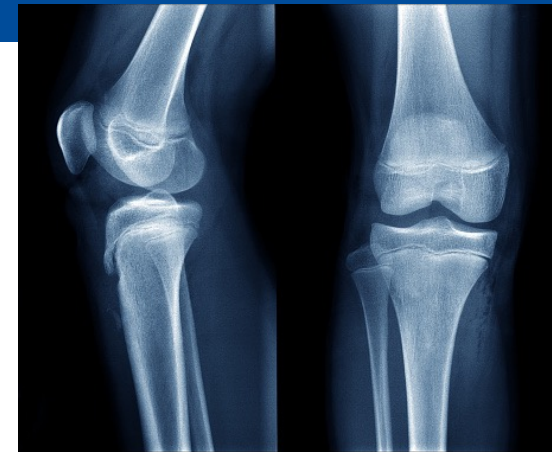
Only patients with symptoms

Pain, Recurrent effusion

VAS >5

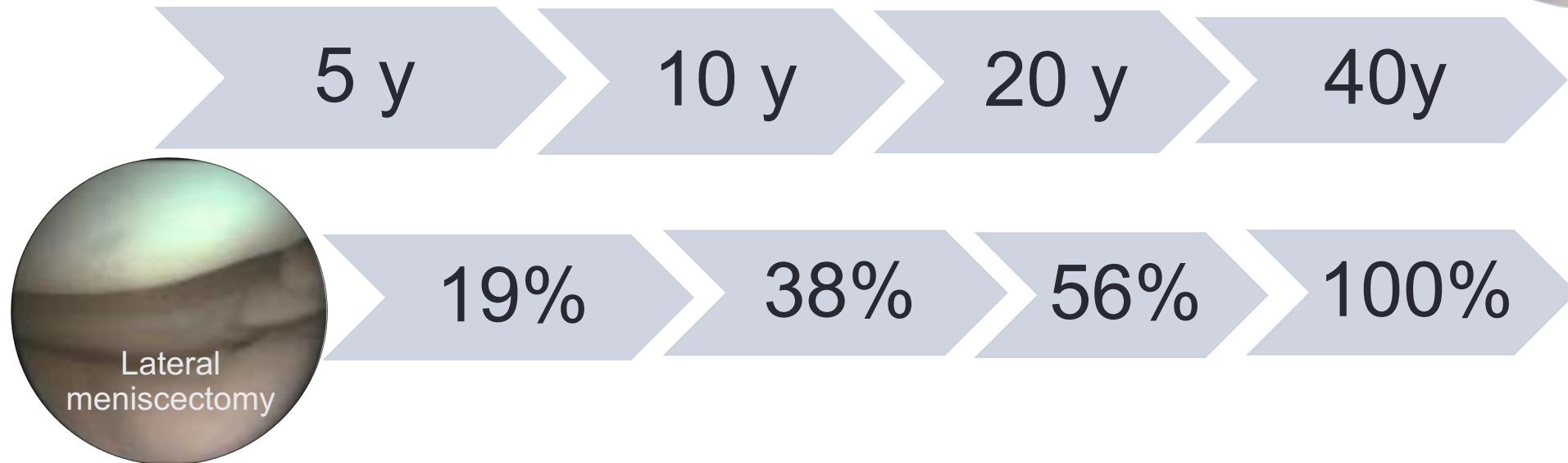
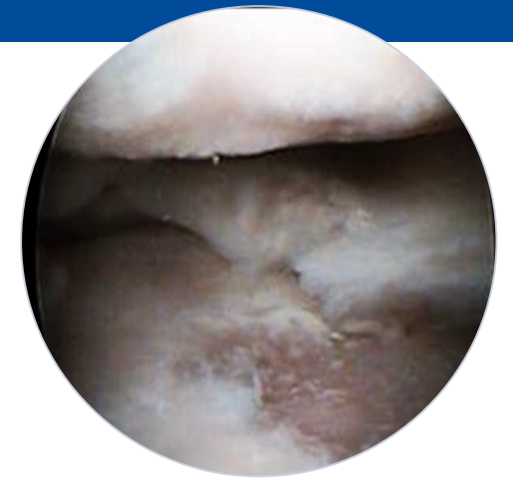
KOOS <50

Follow-up 1X/y +++++



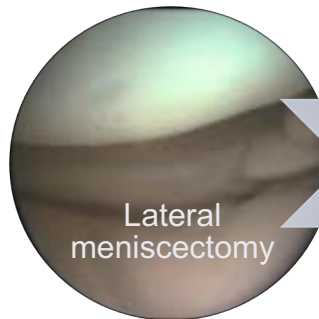
Getgood A¹, et al International Meniscus Reconstruction Experts Forum (IMREF) 2015 Consensus Statement on the Practice of Meniscal Allograft Transplantation. Am J Sports Med. 2017 ; 45(5) :1195-205.

Rate of OA after LM



< 20% Extensive meniscectomies will have symptoms before severe OA

FAILURE RATE = KNEE REPLACEMENT DOES ALLOGRAFT PREVENT OA???



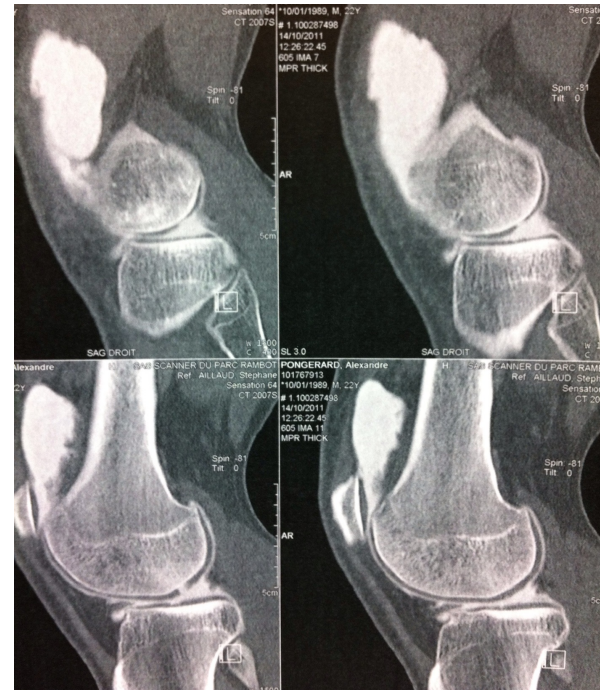
19% 38% 56%



20% 30% 40%

Clinical case 2

- Mr P, 23 y
- Professional Handbal player
- Lateral meniscectomy 24 months ago
- Pain
- Clinical examination:
- Effusion +
- Normal ROM
- Valgus 5°

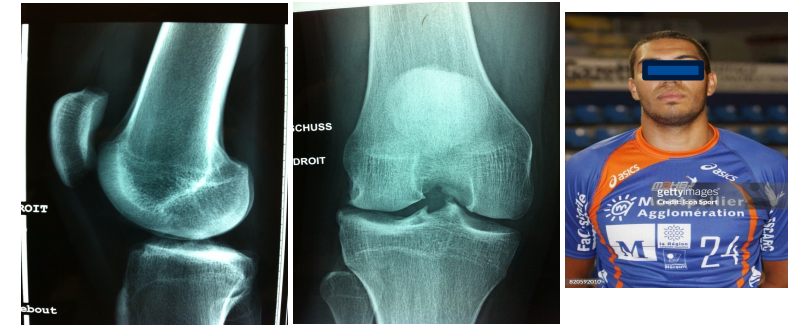


Clinical case 2: professional athlete

Allograft + Valgus HTO in 2011

Played 5 years Premier league

Then Sports Coach



Clinical case 3

- Mr L. 45 y
- Karaté teacher
- Right knee

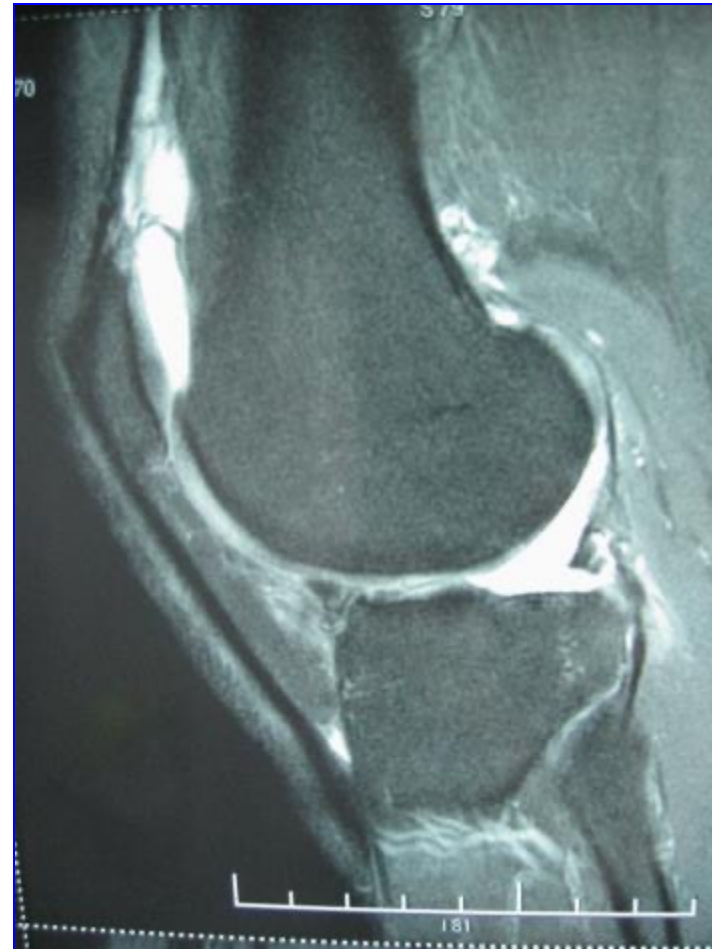
- ACLR 20 y ago
- Lateral meniscectomy 15 y ago

- Knee always symptomatic



Clinical examination

- Lateral pain++
- Swelling
- Stop sports/job
- 0-10-125
- Stable
- Valgus 5°



Radiographs

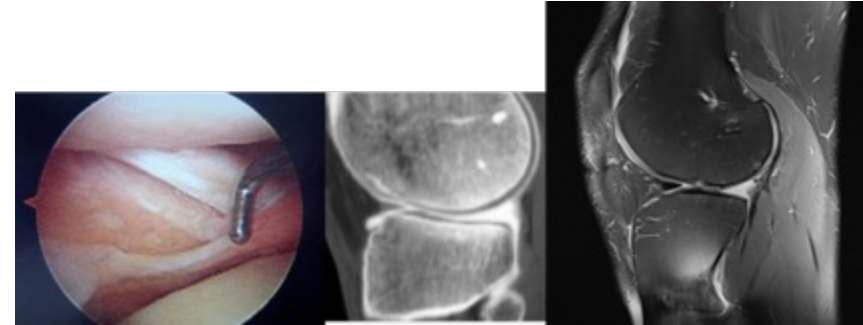
- JSN >50%
- Osteophytes
- Axis: 5° valgus



TREATMENT?

MAT IN PATIENTS WITH OA?

- IF SMALL OA:
- 4 to 16 % failure at 7-10y



Knee Surgery, Sports Traumatology, Arthroscopy (2019) 27:1891–1899
<https://doi.org/10.1007/s00167-019-05459-6>

KNEE



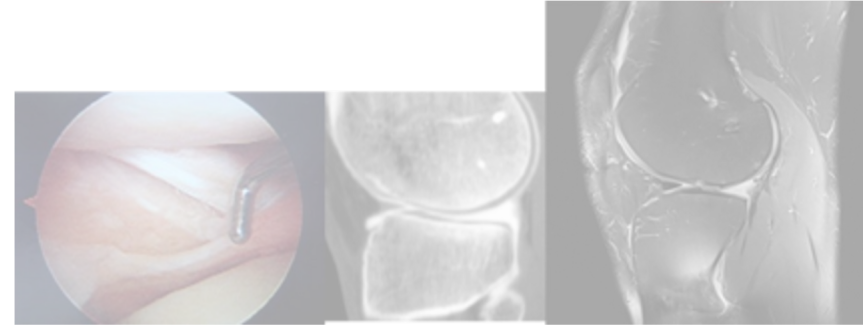
**Higher survivorship following meniscal allograft transplantation
in less worn knees justifies earlier referral for symptomatic patients:
experience from 240 patients**

Benjamin Bloch¹ · Laura Asplin² · Nick Smith² · Peter Thompson² · Tim Spalding² 

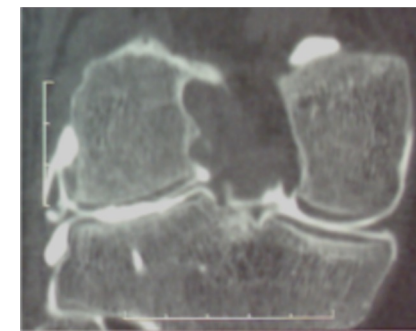
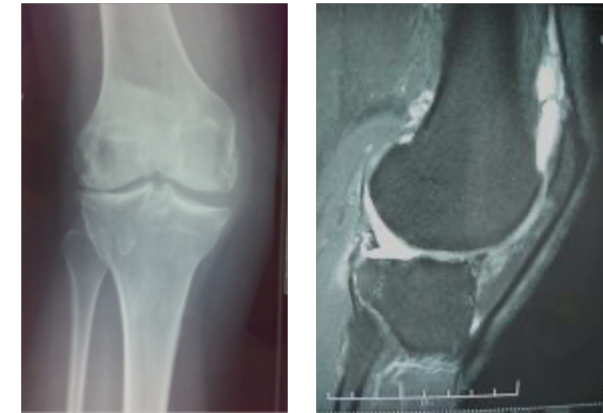


MAT IN PATIENTS WITH OA?

- IF SMALL OA:
- 4 to 16 % failure at 7-10y



- IF significant OA (KL 3-4):
- 31-50% Failure at 3-5 y
- SIR, IT'S TOO LATE FOR A MAT...



Knee Surgery, Sports Traumatology, Arthroscopy (2019) 27:1891–1899
<https://doi.org/10.1007/s00167-019-05459-6>

KNEE



Higher survivorship following meniscal allograft transplantation in less worn knees justifies earlier referral for symptomatic patients: experience from 240 patients

Benjamin Bloch¹ · Laura Asplin² · Nick Smith² · Peter Thompson² · Tim Spalding²

MAT IN PATIENTS WITH OA?

- IF SMALL OA:
- 4 to 16 % failure at 7-10y

- IF significant OA (KL 3-4):
- 31-50% Failure at 3-5 y

- Failure means **Knee replacement**



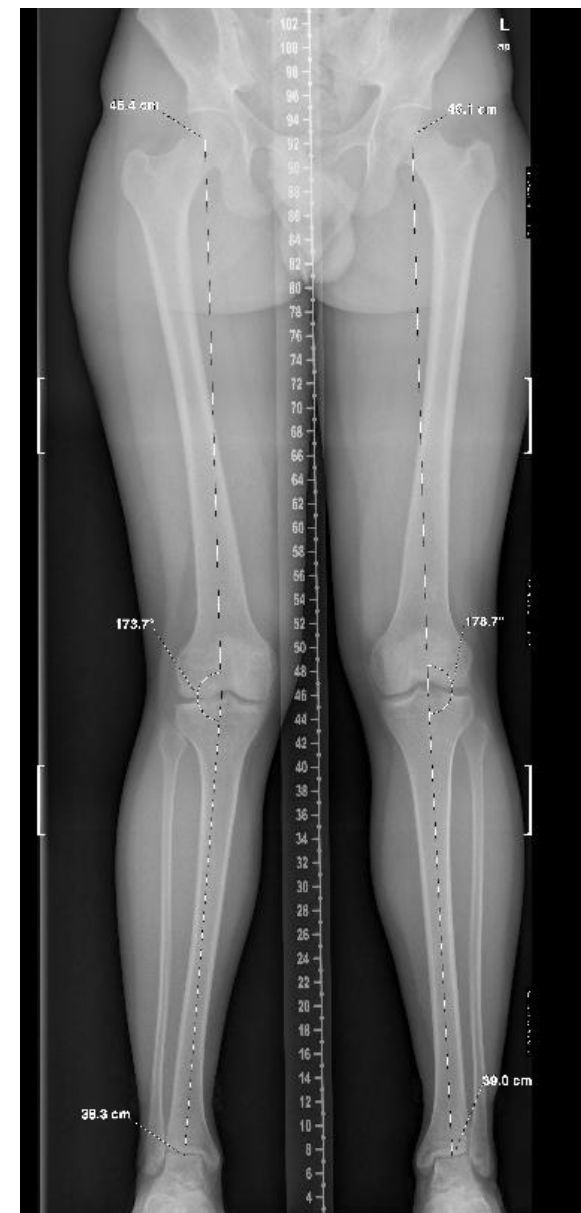
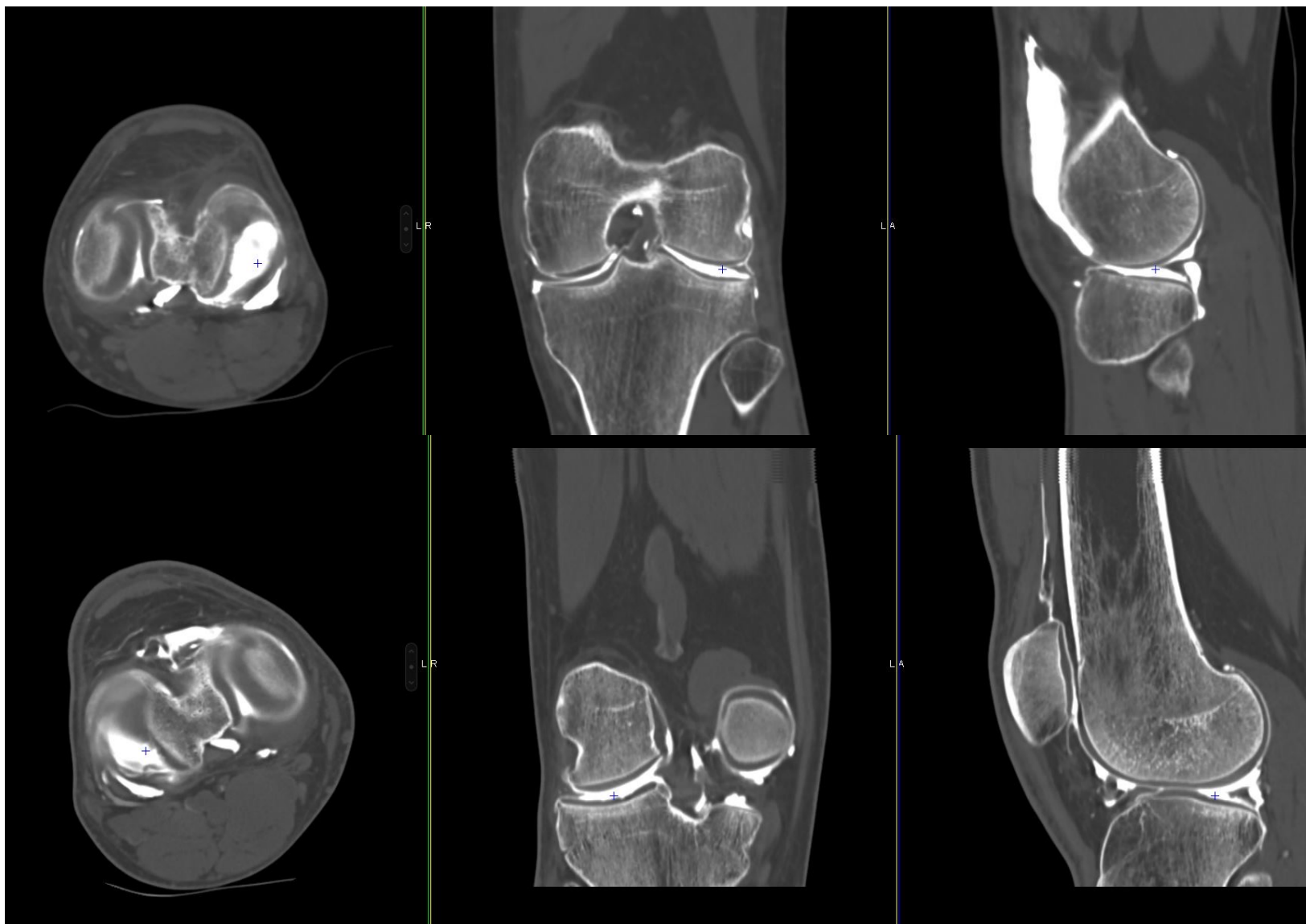
Clinical case 4

- Mr R 23 y
- both knees
- Lateral meniscectomy 2 and 3 y ago
- Knee always symptomatic



Clinical case 4

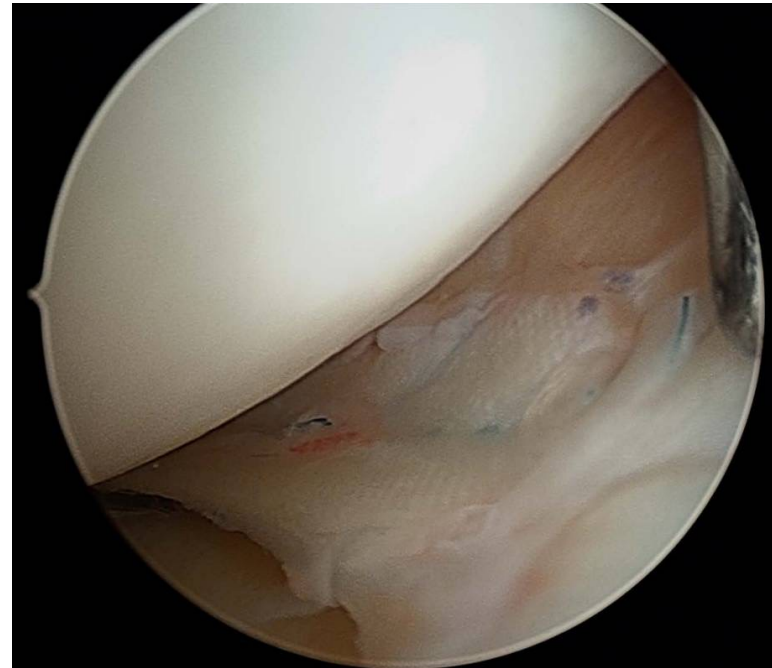
Full ROM
6° valgus



Clinical case 4

Reconstruction (Substitute)

+ HTO



Polyurethane Meniscal Scaffold for the Treatment of Partial Meniscal Deficiency: 5-Year Follow-up Outcomes

A European Multicentric Study

Cecile Toanen, MD, Aad Dhollander,* MD, PT, PhD, Paolo Bulgheroni, MD, Giuseppe Filardo, MD, PhD, Stefano Zaffagnini, MD, PhD, Tim Spalding, MD, Joan Carles Monllau, MD, PhD, Pablo Gelber, MD, Rene Verdonk, MD, PhD, Philippe Beaufils, MD, PhD, Nicolas Pujol, MD, PhD, and Peter Verdonk, MD, PhD
Investigation performed at the Orthopedic Department, Centre Hospitalier de Versailles, Le Chesnay, France

Additional question: Combination of procedures even if favourable axis?

- Inferior results

Prospective Long-Term Evaluation of Meniscal Allograft Transplantation Procedure: A Minimum of 7-Year Follow-Up

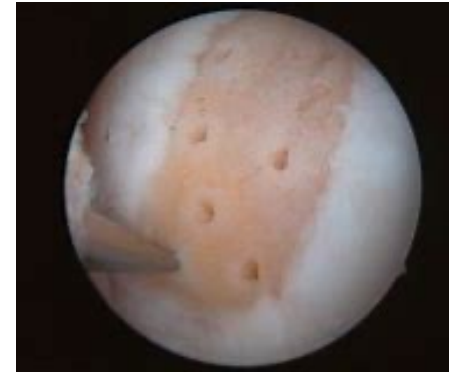
Brian J. Cole, M.D., M.B.A.¹ Bryan M. Saltzman, E.A.² Saravottam Bajaj, B.S.¹ Michael Salata, M.D.² Erika L. Daley, B.S.¹ Eric Strauss, M.D.³ Nikki Veeno, M.D.⁴

¹Division of Sports Medicine, Department of Orthopedics, Rush University Medical Center, Chicago, Illinois
²Department of Orthopedics, University Hospitals Case Medical Center, Cleveland, Ohio
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Address for correspondence and reprint requests: Brian J. Cole, M.D., M.B.A., Department of Orthopedics, Division of Sports Medicine, Rush University Medical Center, Milwaukee Orthopedics, 1611 West Harrison Street, Suite 208, Chicago, IL 60612 (e-mail: bcole@rushortho.com)

J Knee Surg 2012;25:303-309

- No indication to add an osteotomy
- « To protect the allograft »
- If the axis is OK



Knee Surg Sports Traumatol Arthrosc (2015) 23:303–309
DOI 10.1007/s00167-014-3291-x

KNEE

Meniscal allograft with or without osteotomy: a 15-year follow-up study

Hussain A. Kazi · Wael Abdel-Rahman ·
Philip A. Brady · John C. Cameron

Conclusions: AXIS?

- Don't hesitate to combine
- MAT
- And
- Osteotomy
- If needed
- Rare indications
- Goal: 0-1° Varus

