

Jumper Knee

La chirurgie du ligament patellaire

J.Pernin, Angers Trélazé
CMC sport et Arthrose
Clinique saint Léonard



Introduction

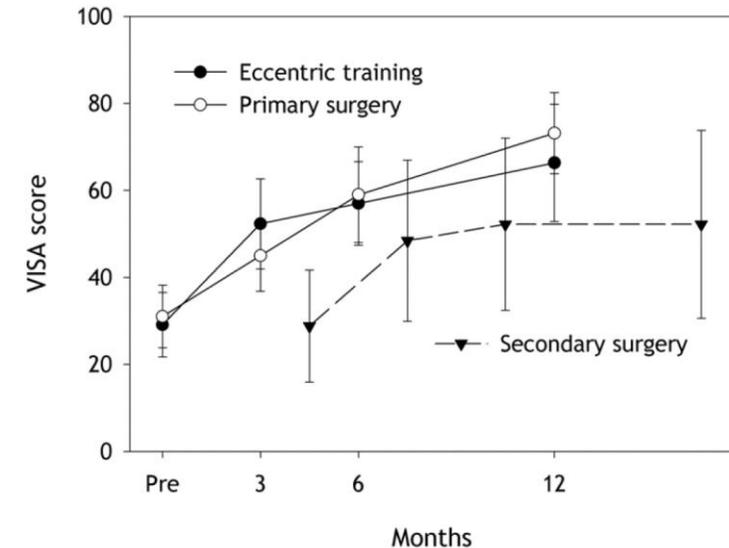
- Place du traitement chirurgical ?
 - Après échec des autres traitements



SURGICAL TREATMENT COMPARED WITH ECCENTRIC TRAINING FOR PATELLAR TENDINOPATHY (JUMPER'S KNEE)

A RANDOMIZED, CONTROLLED TRIAL

BY ROALD BAHR, MD, PhD, BJØRN FOSSAN, PT, SVERRE LØKEN, MD, AND LARS ENGBRETSSEN, MD, PhD

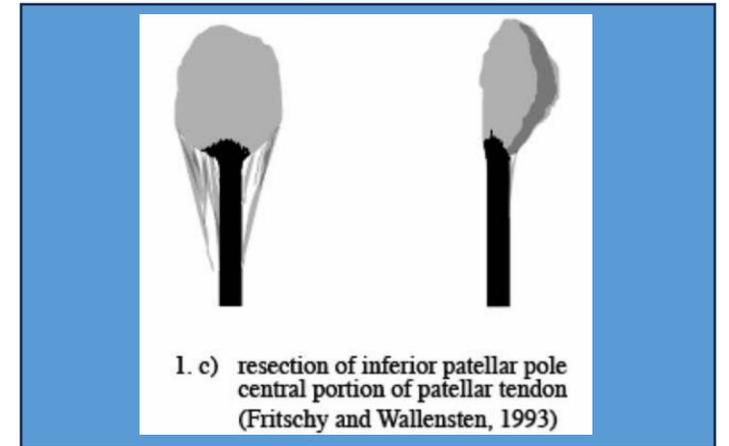
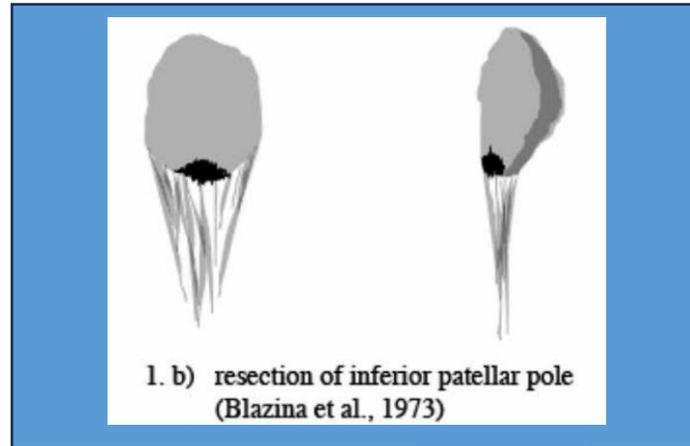
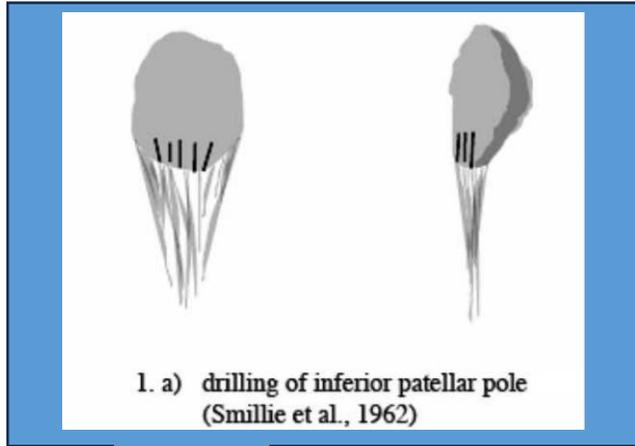


Non-surgical treatment of patellar tendinopathy: A systematic review of randomized controlled trials

Trevor Vander Doelen ^a · Wilma Jelley ^b

Traitement non chirurgical améliorerait 90% des patients
Traitement chirurgical ne concernerait que les 10 % restants

Traitement chirurgical ciel ouvert

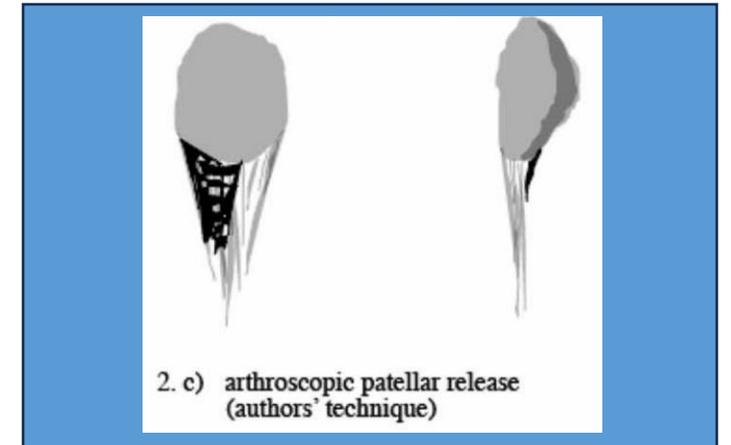
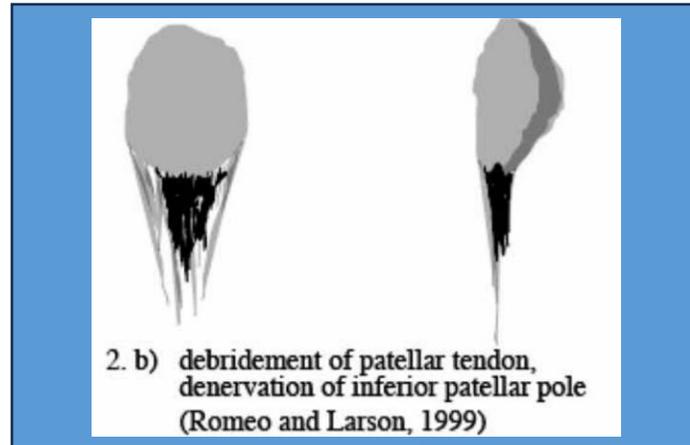
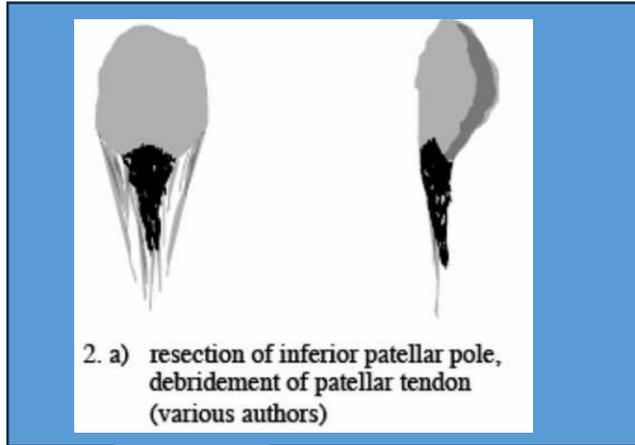


1962

1973

1993

Traitement chirurgical arthroscopique

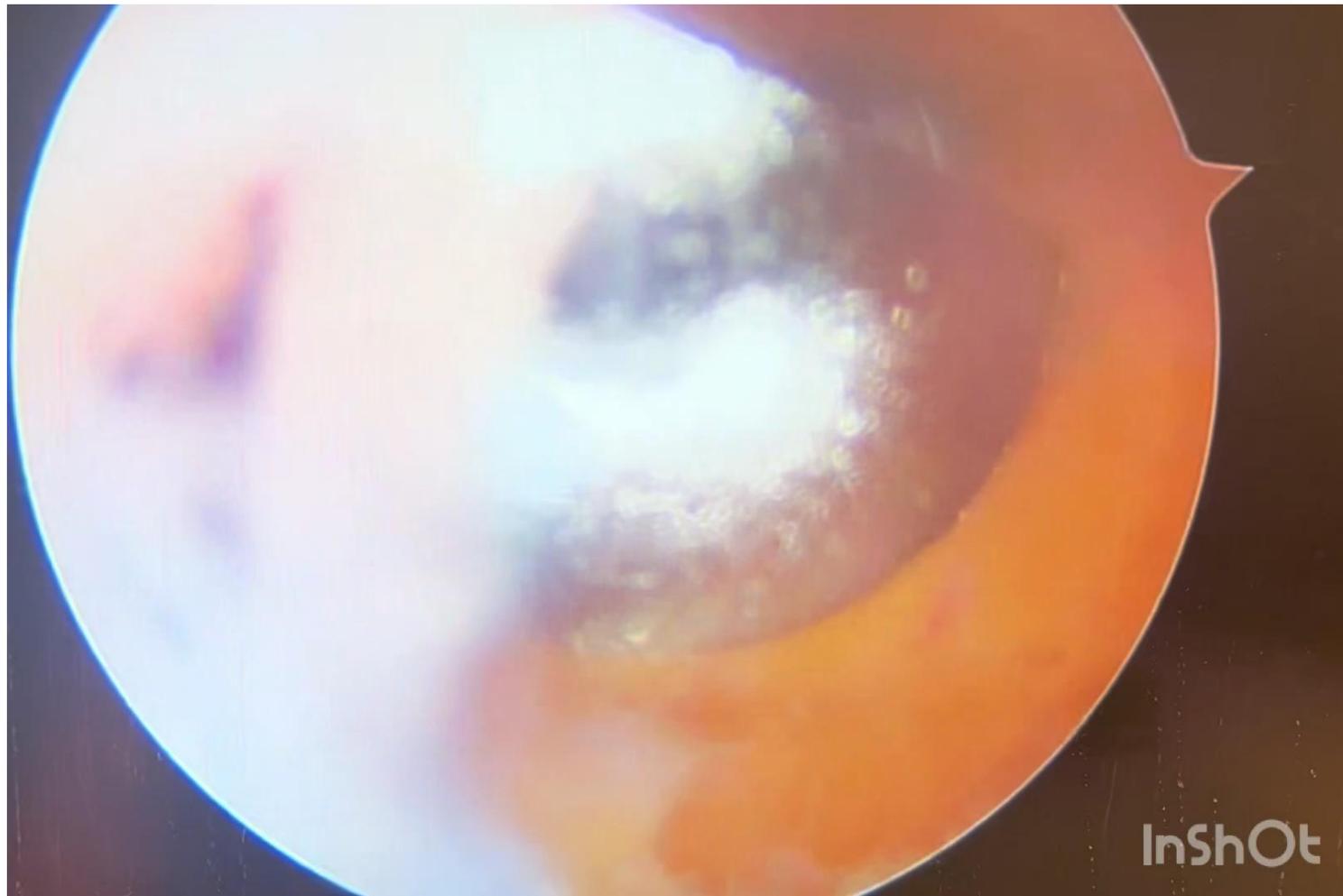


1997

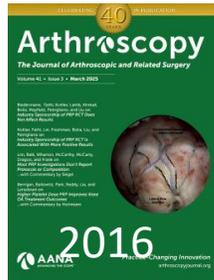
1999

2006

Traitement chirurgical arthroscopique

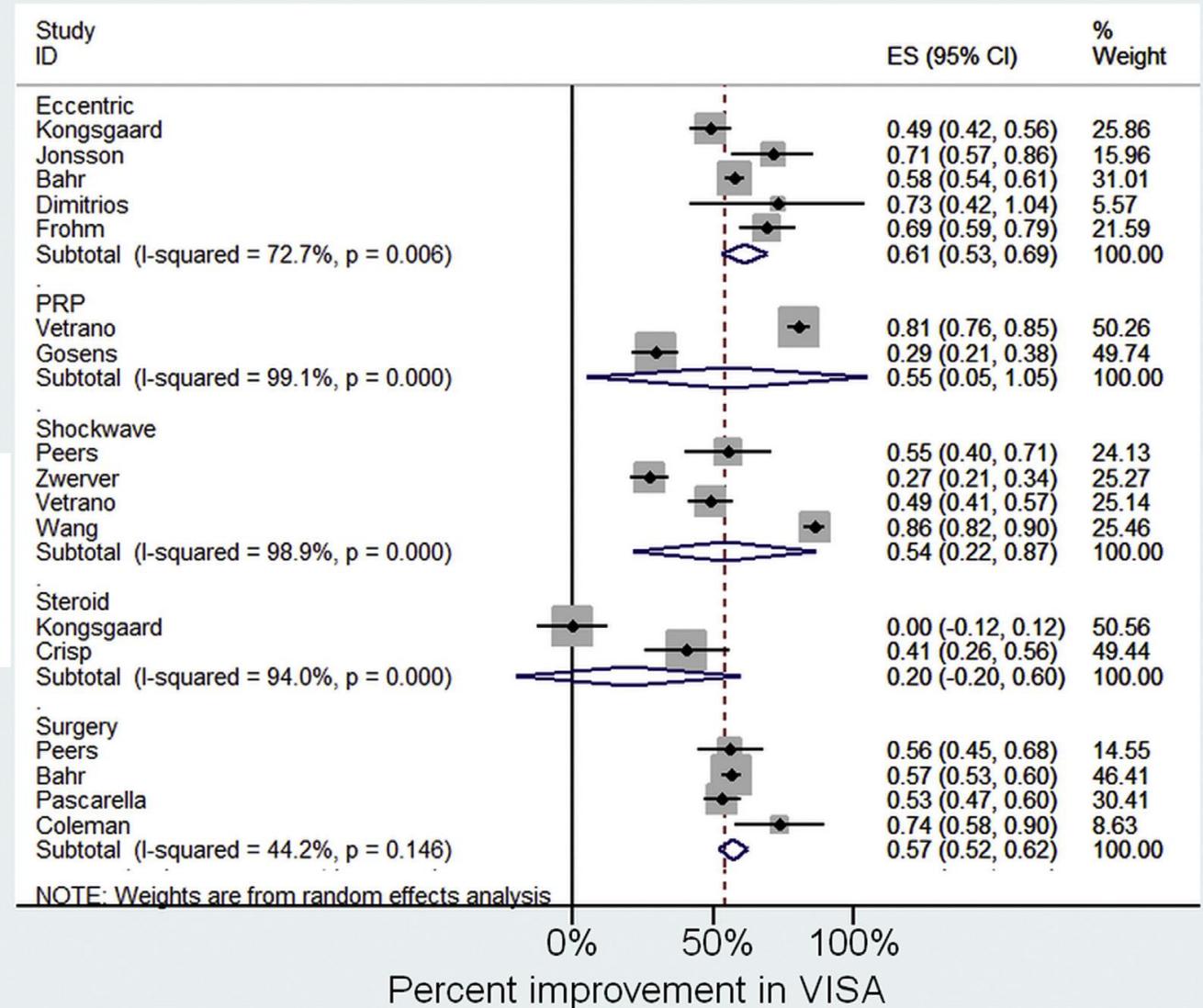


Résultats du traitement chirurgical ?

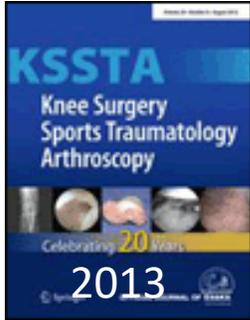


Treatment Options for Patellar Tendinopathy: A Systematic Review

Joshua S. Everhart, M.D., M.P.H., Devon Cole, B.S., John H. Sojka, M.D.,
John D. Higgins, B.S., Robert A. Magnussen, M.D., M.P.H., Laura C. Schmitt, P.T., Ph.D.,
and David C. Flanigan, M.D.



Chirurgie arthroscopique vs Ciel ouvert



Open versus arthroscopic surgical treatment of chronic proximal patellar tendinopathy. A systematic review

Giulio Maria Marcheggiani Muccioli · Stefano Zaffagnini · Kyriakos Tsapralis · Ester Alessandrini · Tommaso Bonanzinga · Alberto Grassi · Laura Bragonzoni · Stefano Della Villa · Maurilio Marcacci

Chirurgie Open vs Arthroscopie

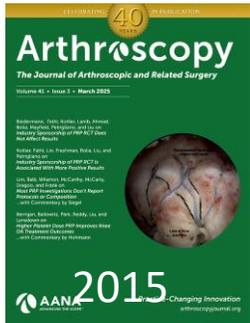
Retour au sport : 78% Vs. 84%
Délai retour au sport : ?
Complications : ?

Pas de résultat meilleur pour l'arthroscopie ,
faible niveau de preuve

The methodology of studies in this field has improved over the past 15 years, but well-designed RCTs using validated patient-based outcome measures are still lacking.

Minimally invasive arthroscopically assisted procedures have not reported statistically significant better results when compared to open surgery in the treatment of chronic proximal patellar tendinopathy.

Chirurgie arthroscopique vs Ciel ouvert



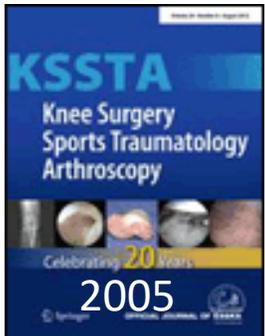
Results of Surgical Treatment of Chronic Patellar Tendinosis (Jumper's Knee): A Systematic Review of the Literature

Matthias Brockmeyer, M.D., Nora Diehl, M.D., Cornelia Schmitt, M.D.,
Dieter M. Kohn, M.D., Ph.D., and Olaf Lorbach, M.D., Ph.D.

Résultats : Arthro. Vs Open
Succès : 91%. Vs 87%
RTS : 82%. Vs. 78%
Time RTS : 3,9 m Vs 8,3 m
Complications 0 Vs 0. ??

ery and return to sport activities. Therefore, arthroscopic techniques may be a good alternative to current open procedures. With regard to a faster recovery and return to sporting activities, arthroscopic treatment may be the preferred method for surgical treatment of chronic patellar tendinosis.

Sclérothérapie des néovaisseaux



Neovascularisation in chronic painful patellar tendinosis—promising results after sclerosing neovessels outside the tendon challenge the need for surgery

 **Håkan Alfredson**
 **Lars Öhberg**



Injection de Polidocanol : produit sclérosant
Guidage échographique

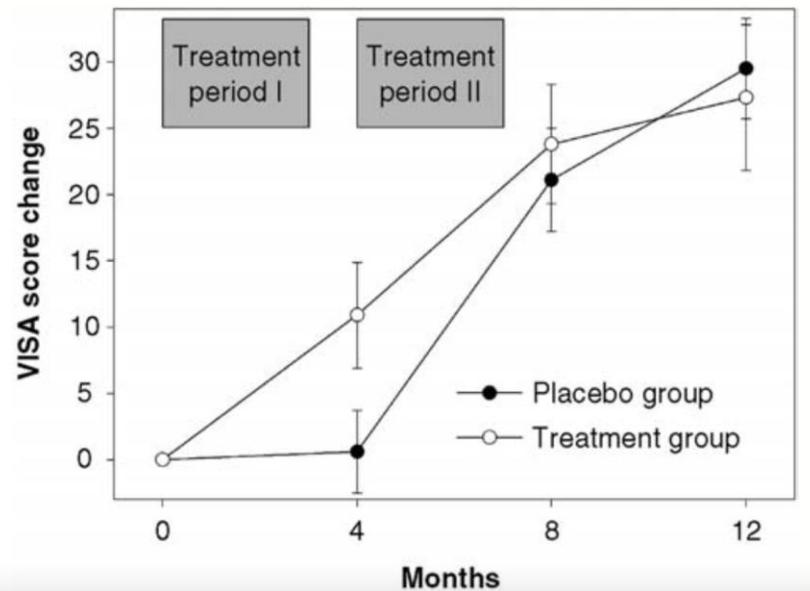
Sclérothérapie des néovaisseaux



Ultrasound-Guided Sclerosis of Neovessels in Painful Chronic Patellar Tendinopathy

A Randomized Controlled Trial

Aasne Hoksrud,* Lars Öhberg,[†] MD, PhD, Håkan Alfredson,^{‡§} MD, PhD, and Roald Bahr,^{*||} MD, PhD



Injection de Polidocanol : produit sclérosant
Guidage échographique



Sclérothérapie des néovaisseaux

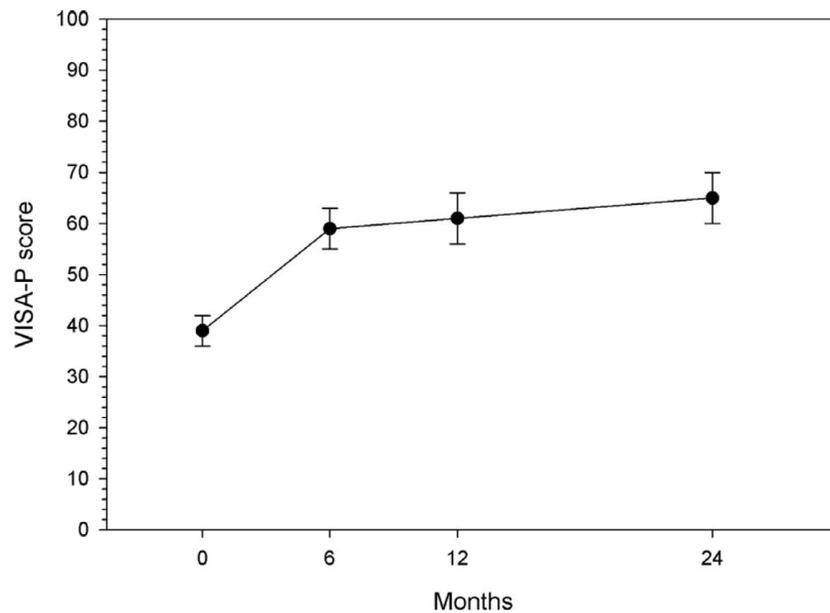


Ultrasound-Guided Sclerosis of Neovessels in Patellar Tendinopathy

A Prospective Study of 101 Patients

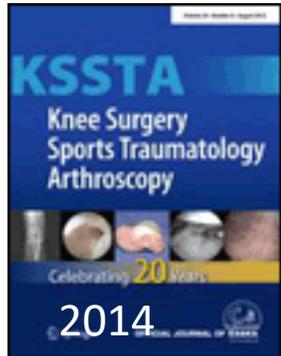


Aasne Hoksrud,^{*†} MD, Thomas Torgalsen,[‡] MD, Herlof Harstad,[§] MD, Simen Haugen,[§] MD, Thor Einar Andersen,^{*} MD, PhD, May Arna Risberg,^{||} PT, PhD, and Roald Bahr,^{*} MD, PhD
Investigation performed at Hjelp24 NIMI, Oslo, Norway and Sykehuset Vestfold, Stavern, Norway



Sclerosing treatment with polidocanol resulted in a moderate improvement in knee function and reduced pain in a heterogeneous group of patients with patellar tendinopathy. Nevertheless, few of the patients were cured, and the majority still had reduced function and substantial pain after 24 months of follow-up.

Electrolyse des néovaisseaux



Clinical results after ultrasound-guided intratissue percutaneous electrolysis (EPI[®]) and eccentric exercise in the treatment of patellar tendinopathy

F. Abat · P. E. Gelber · F. Polidori ·
J. C. Monllau · J. M. Sanchez-Ibañez

40 PATIENTS 10 ans FU

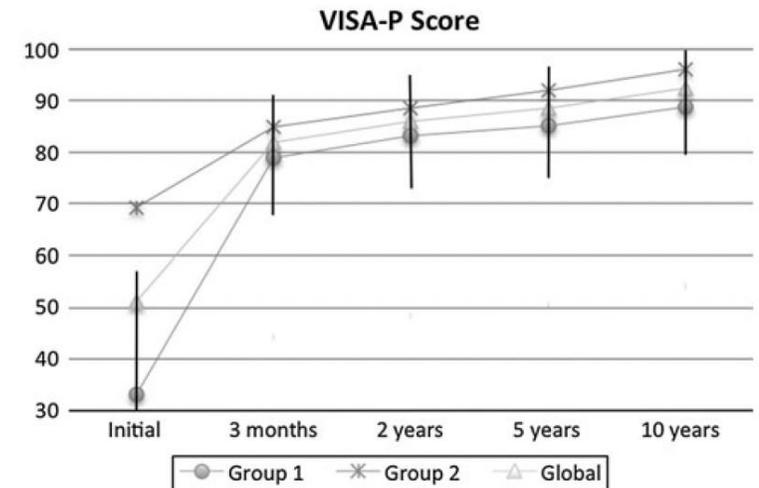
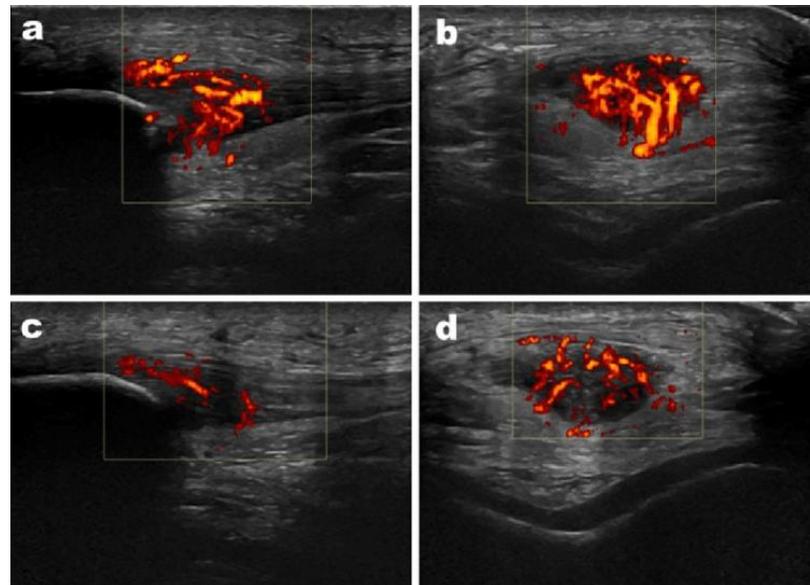
RESULTAT :

80% Excellent

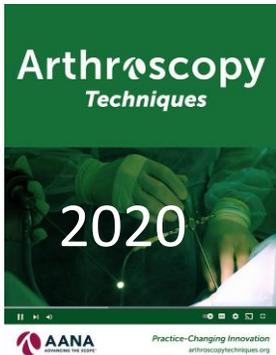
17,5% Bon

2,5% Mauvais

Retour au sport 3 mois

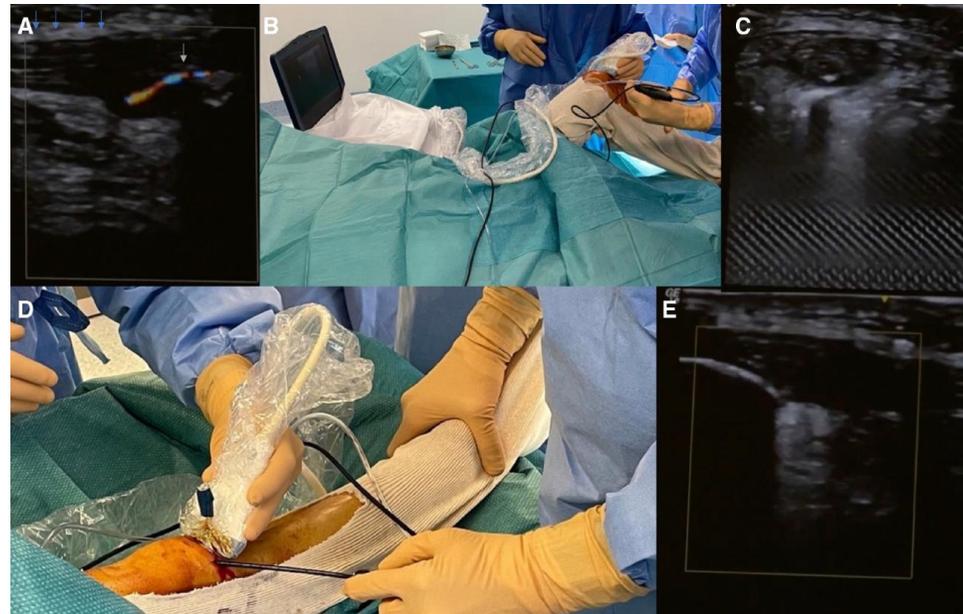


Electrocoagulation des néovaisseaux



Ultrasound-Guided Electrocoagulation of Neovessels for Chronic Patellar Tendinopathy

João Luís Moura, M.D., Felipe Galvão Abreu, M.D., Carlos Mesquita Queirós, M.D.,
Gabriele Pisanu, M.D., Julien Clechet, M.D., Thaïs Dutra Vieira, M.D., and
Bertrand Sonnery-Cottet, M.D.





Ultrasound Guided Electrocoagulation

Ultrasound-guided Electrocoagulation of Neovessels for Chronic Patellar Tendinopathy

João Luís Moura, Felipe Galvão Abreu, Carlos Mesquita Queirós, Gabriele Pisanu, Julien Clechet, Thais Dutra Vieira, Bertrand Sonnery-Cottet



Ultrasound-Guided Electrocoagulation of Neovessels for Chronic Patellar Tendinopathy.

Moura JL et al. *Arthrosc Tech.* 2020

Electrocoagulation des néovaisseaux

BMJ Open
Sport &
Exercise
Medicine

2024

Ultrasound-guided electrocoagulation of neovascularisation for persistent patellar tendinopathy in athletes: a cohort study of 25 patients with a mean follow-up of 5 years from the SANTI Study Group

Alessandro Carrozzo¹,² Jobe Shatrov,² Abdo El Helou,³ Francesco Pettinari,⁴ Ali Alayane,⁴ Ahmad Abed Ali,⁴ Julien Clechet,⁴ Thais Dutra Vieira,⁴ Bertrand Sonnerly-Cottet⁴

	Pre-op	Post-op
VISA-P, mean \pm SD	53.1 \pm 14.9	90 \pm 12.2
Kujala, mean \pm SD	59.7 \pm 17.9	93.85 \pm 9.9
VAS, mean \pm SD	6.8 \pm 1.6	1.65 \pm 1.5
Modified Blazina, n (%)		
Stage 0	0	16 (64)
Stage 1	0	4 (16)
Stage 2	3 (12)	2 (8)
Stage 3	12 (48)	2 (8)
Stage 4	8 (32)	1 (4)
Stage 5	2 (8)	0

25 patients
16 professionnels
Recul 61 mois

Retour au sport :
3,8 mois \pm 2,1
Professionnels :
3,3 mois \pm 1,4

10% des patients récalcitrants
au traitement médical et fonctionnel
après > 6 mois de traitement

Séries petits effectifs

Amélioration mais guérison rare

Pas de différence Arthroscopie / ciel ouvert

Mais : complications ?

Faible niveau de preuve

Délai retour sport plus long à ciel ouvert

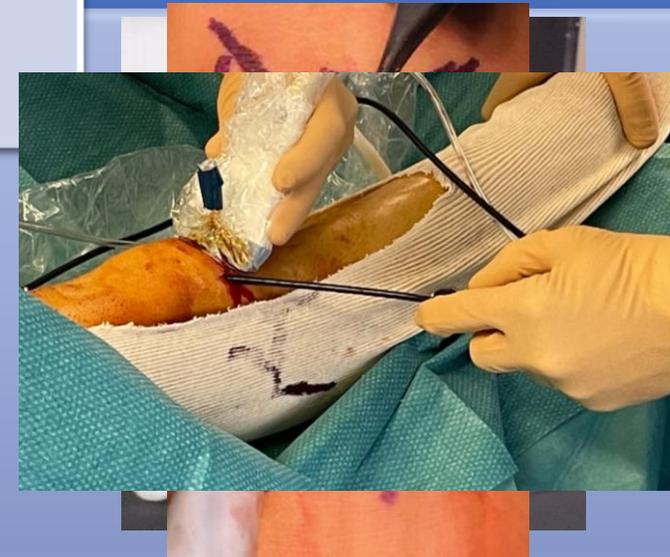
Conclusion

Résultats prometteurs des techniques
mixtes :

Echo/ chirurgie + Electrocoagulation

Retour au sport précoce

À proposer avant chirurgie arthro ou open



Merci de votre attention

