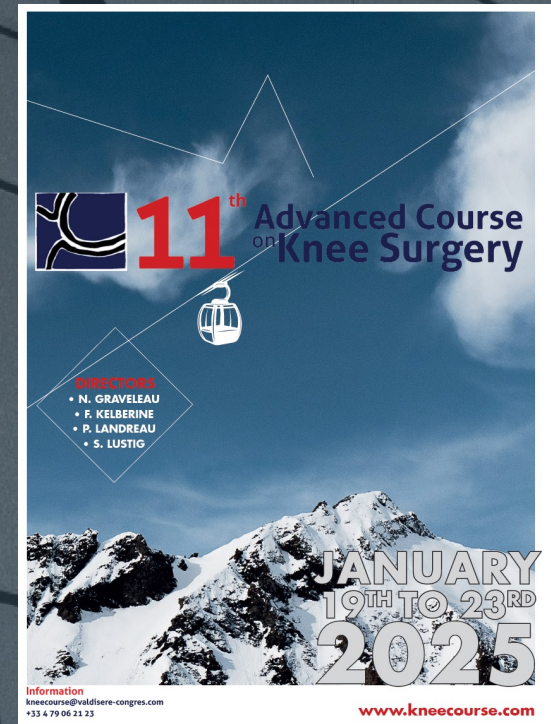


Hamstring harvesting

(in ACL reconstruction)

Nicolas GRAVELEAU, Philippe COLOMBET,
Nicolas BOUGUENNEC, Antoine MORVAN ,
Pierre LABOUDIE & Aurélien HALLE
Knee surgeons

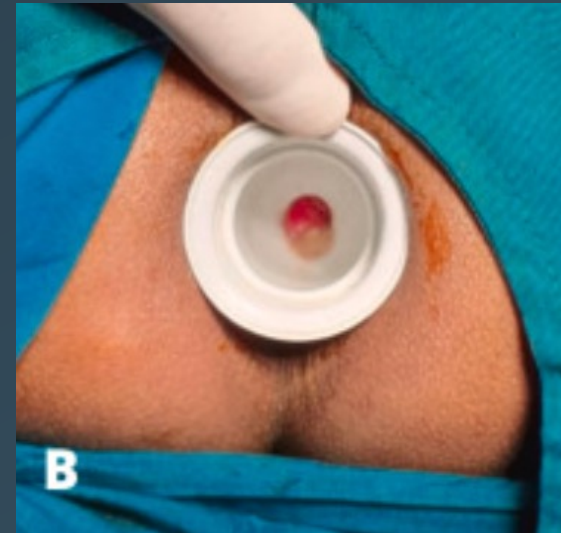
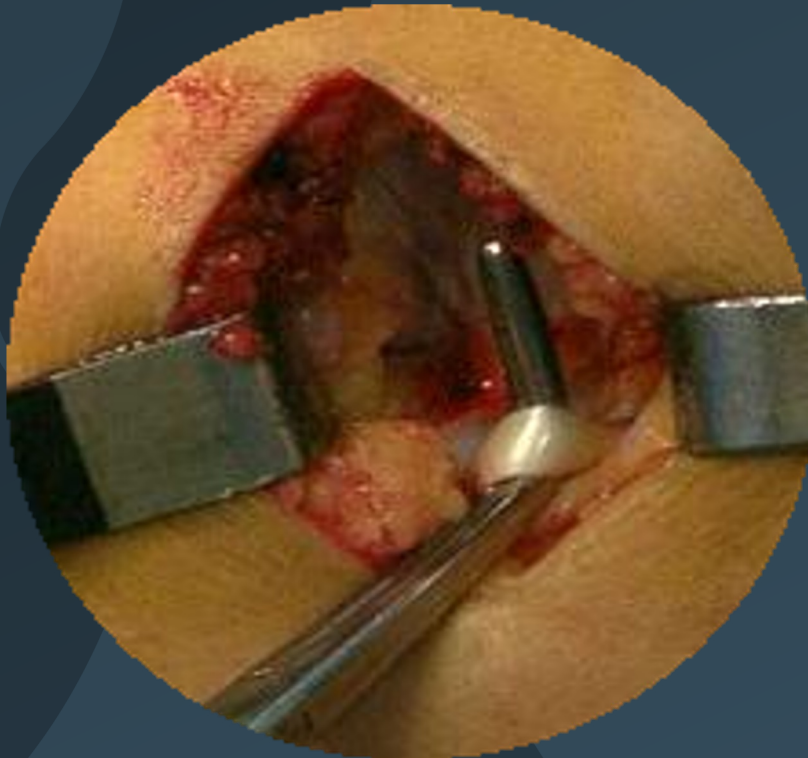
Clinique du Sport de Bordeaux-Merignac



Val d'Isère Advanced Course Knee Course
January 2025

01

Introduction to « *What we never see well* »



B

Hemoroidal surgery



Conférence d'enseignement SFA 2024

Les ischios de bas en haut



Thanks!



Thibaut **Noailles** - Cécile **Toanen**

Alexandre **Hardy** - Nicolas **Graveleau**

02

Technique



Hamstring Harvest

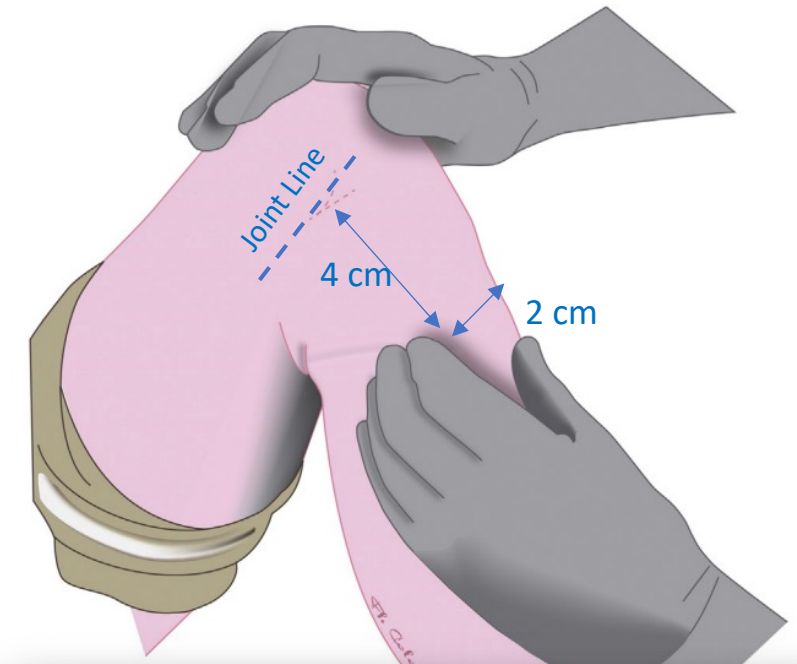
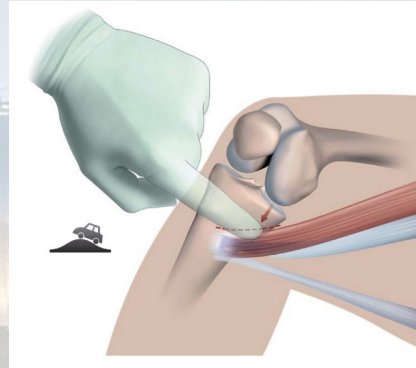
- « EASY ? »

*Harvesting the hamstring tendons is not straightforward to perform or to teach. **H.Lanternier***

- 3 finger widths

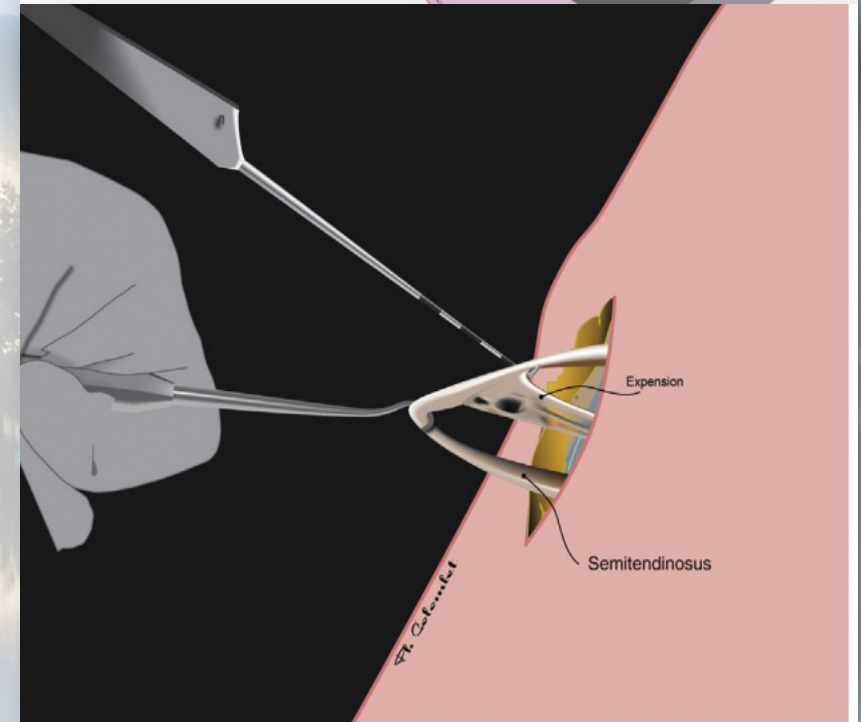
- Sub-cutaneous blunt *finger/sponge* dissection

- 4 cm distal to J.Line / 2 cm medial to TTA



Minimally Invasive Anterior Semitendinosus Harvest:
A Technique to Decrease Saphenous Nerve Injury

Philippe Colombet, M.D., and Nicolas Graveleau, M.D.



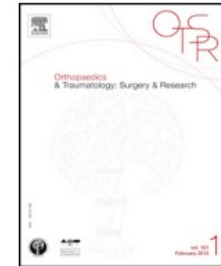


« Must HAVE » to read (open access) ...« french »



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www.em-consulte.com/en



Surgical techniques

Short medial approach harvesting of hamstring tendons

H. Lanternier*, J.B. de Cussac, T. Collet

Polyclinique de l'Europe, 33, boulevard de l'Université, 44600 Saint-Nazaire, France



Minimally Invasive Anterior Semitendinosus Harvest: A Technique to Decrease Saphenous Nerve Injury

Philippe Colombet, M.D., and Nicolas Graveleau, M.D.



Minimally Invasive Anterior Semitendinosus Harvest

*Dr. Philippe COLOMBET MD
Knee Surgeon*

*Dr Nicolas GRAVELEAU MD
Knee Surgeon*

Bordeaux-Mérignac
Sports medicine center
France

Technical assistance

- With a scope

Technical Note

Endoscopic-Assisted Hamstring Tendon Harvesting

Christos K. Yiannakopoulos, M.D., Nikolaos-Platon Sachinis, M.D., and
Apostolos Habipis, M.D.

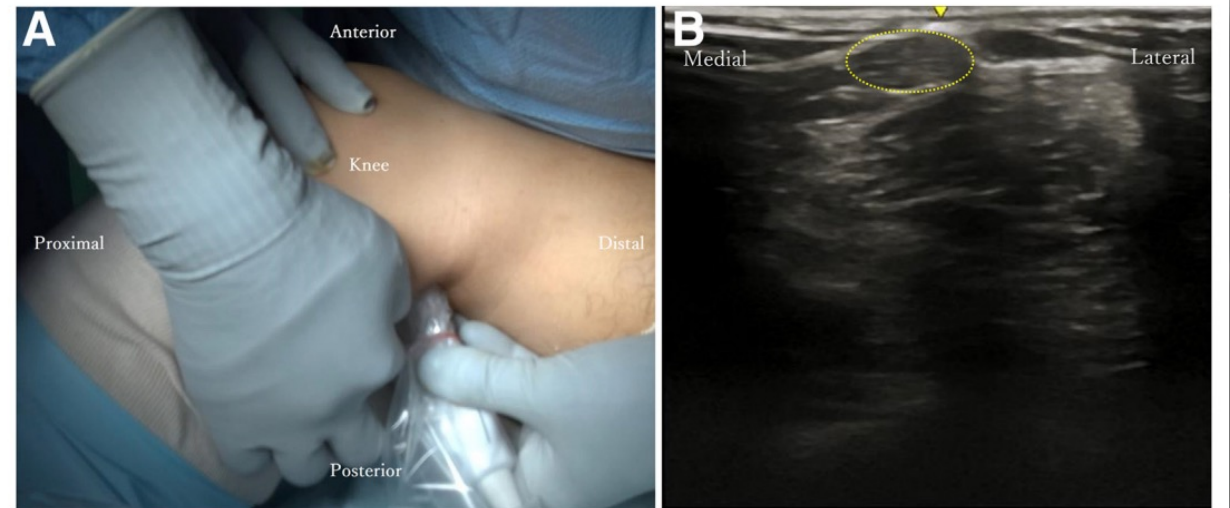


- Under Ultrasonographic guidance

Technical Note

Ultrasound-Guided Posteromedial Semitendinosus Tendon Harvest

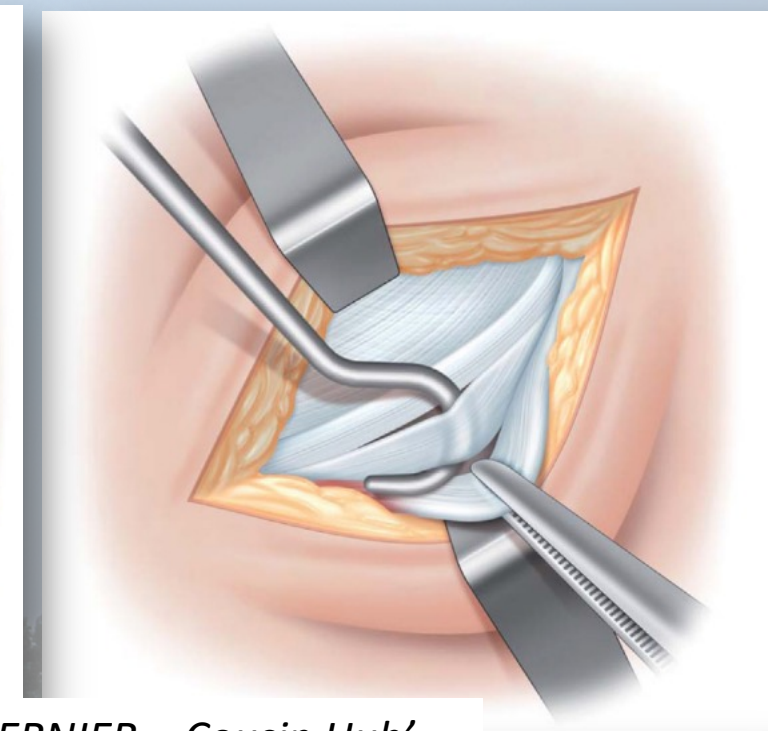
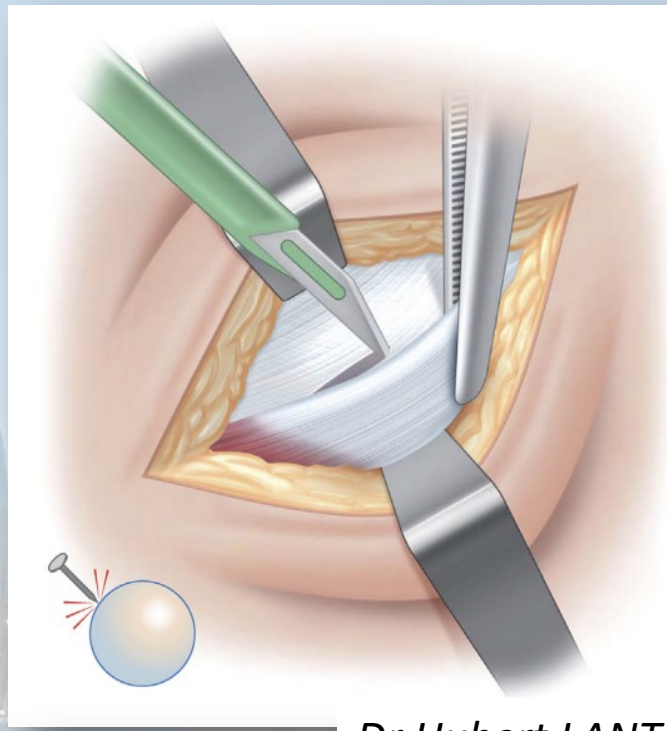
Alexander Ho Jr., M.D., Hiroshi Ohuchi, M.D., Ph.D., Takuya Okada, M.D.,
Shuzo Takazawa, M.D., Shin Yamada, M.D., and Yuki Kato, M.D., Ph.D.



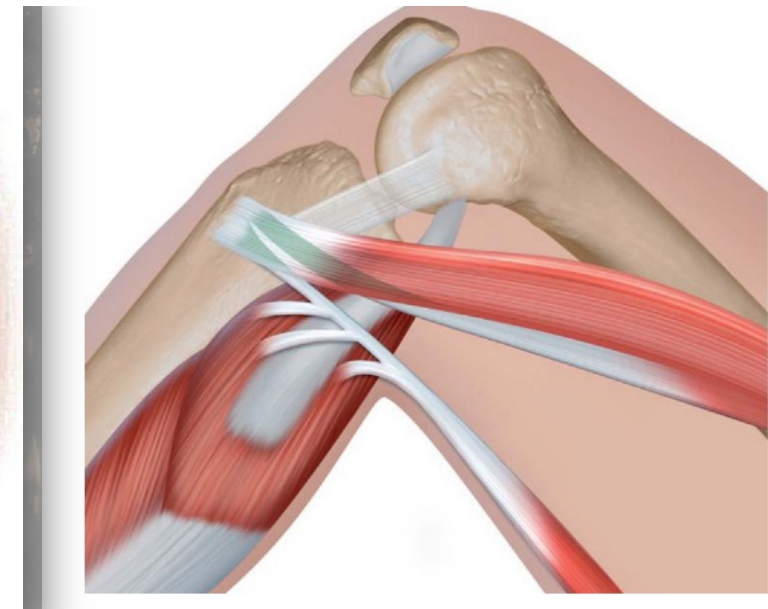
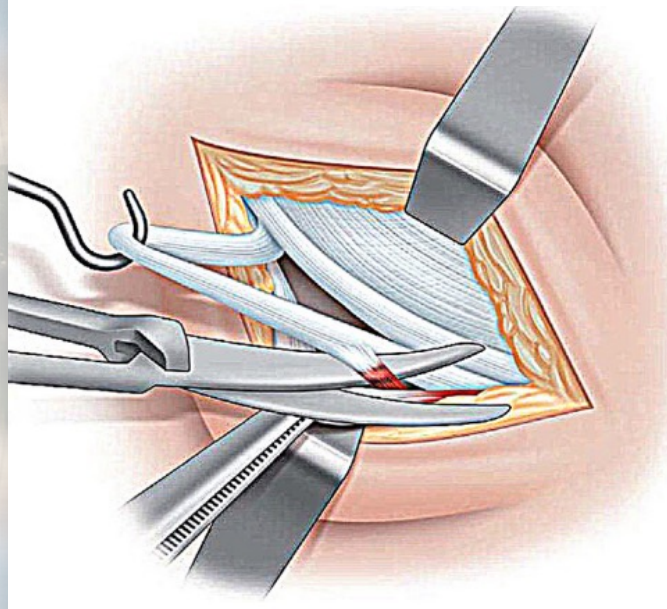
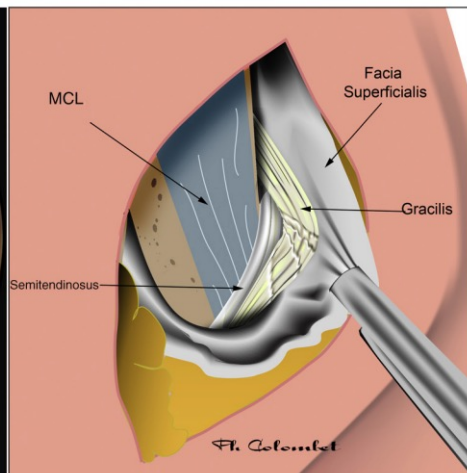
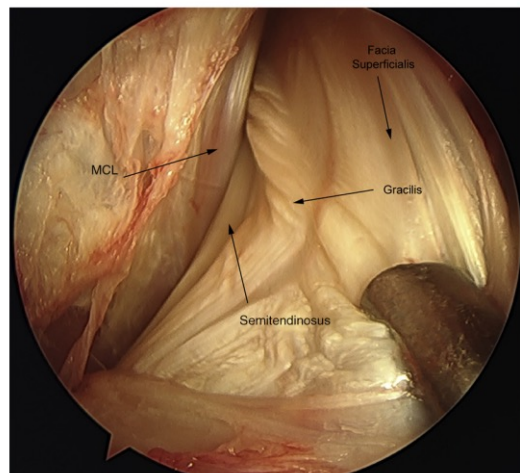


Steps

- Vertical incision
- Subcutaneous dissection (sponge)
- Wave's sign / opening of Sartorius aponevrosis
- SEE the shiny oblique distal sMCL
- Gr Superficial / ST deeper



Dr Hubert LANTERNIER « Cousin Hub' »





Complications

- Iatrogenic neurovascular damage
- Premature amputation of the tendons
- Graft contamination
- Postoperative hematoma

How to Avoid Common Complications in Hamstrings Harvest for Anterior Cruciate Ligament Reconstruction: A Practical Guide

Filippo Familiari, MD; Michelangelo Palco, MD; Raffaella Russo, MD; Robert F. LaPrade, MD, PhD; Roberto Simonetta, MD



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Review article

Complications following harvesting of patellar tendon or hamstring tendon grafts for anterior cruciate ligament reconstruction:
Systematic review of literature



A. Hardy^{a,b,*}, L. Casabianca^{a,b}, K. Andrieu^{b,c}, L. Baverel^c, T. Noailles^{b,c}, the Junior French Arthroscopy Society

^a Service de chirurgie orthopédique, hôpital Cochin, 27, rue du Faubourg-Saint-Jacques, 75014 Paris, France

^b Société française d'arthroscopie Junior (SFAJ), France

^c Service de chirurgie orthopédique, hôpital de Nantes, 1, place Alexis-Ricordeau, 44093 Nantes, France

Oblique incision ?

- Less nerve palsy (level II)
- Not linked to:
 - *Anterior knee pain*
 - *Knee ROM limitation,*
 - *Functional scores.*

Ochiai et al. *Journal of Orthopaedic Surgery and Research* (2017) 12:101
DOI 10.1186/s13018-017-0596-x

Journal of Orthopaedic
Surgery and Research

RESEARCH ARTICLE

Open Access

Injury to infrapatellar branch of saphenous nerve in anterior cruciate ligament reconstruction using vertical skin incision for hamstring harvesting: risk factors and the influence of treatment outcome

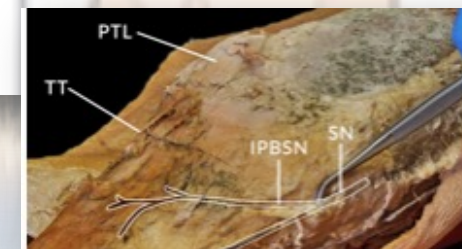
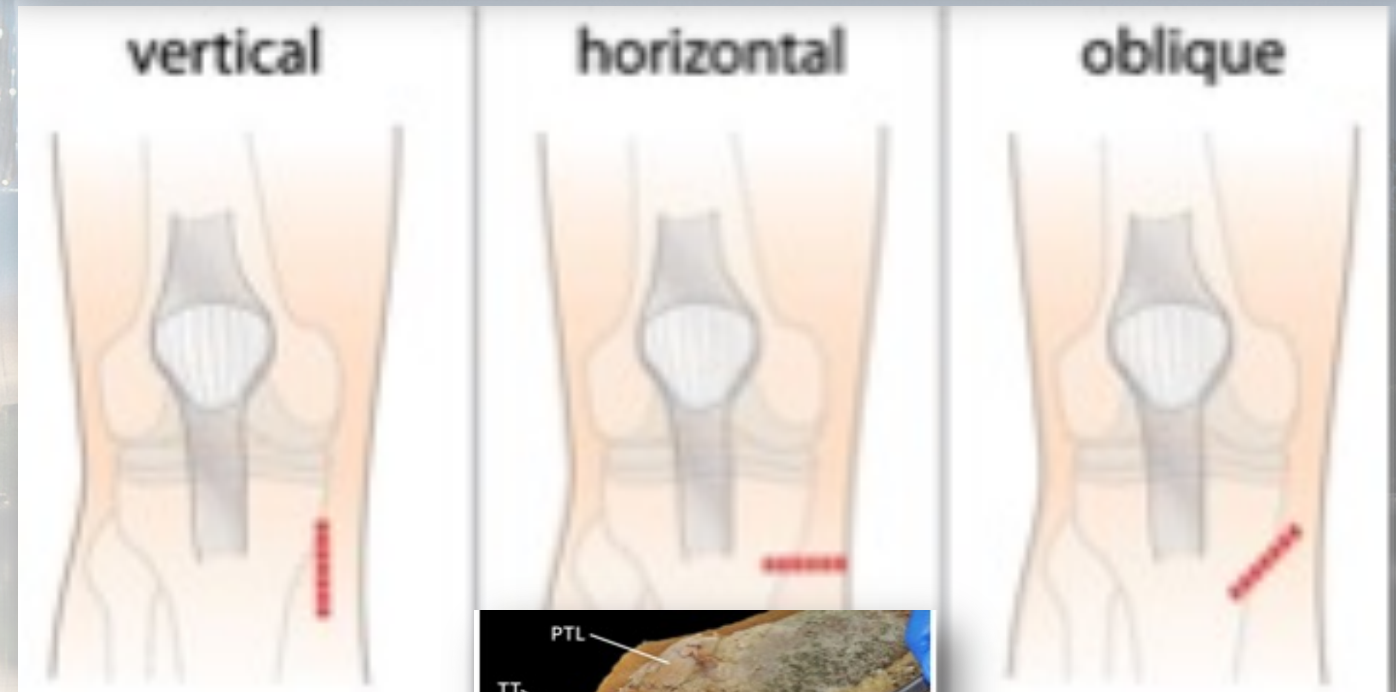
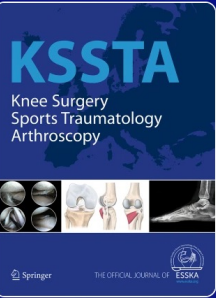
Satoshi Ochiai^{1*}, Tetsuo Hagino¹, Shinya Senga¹, Takashi Yamashita¹, Kotaro Oda¹ and Hirotaka Haro²



[Home](#) > [Knee Surgery, Sports Traumatology, Arthroscopy](#) > Article

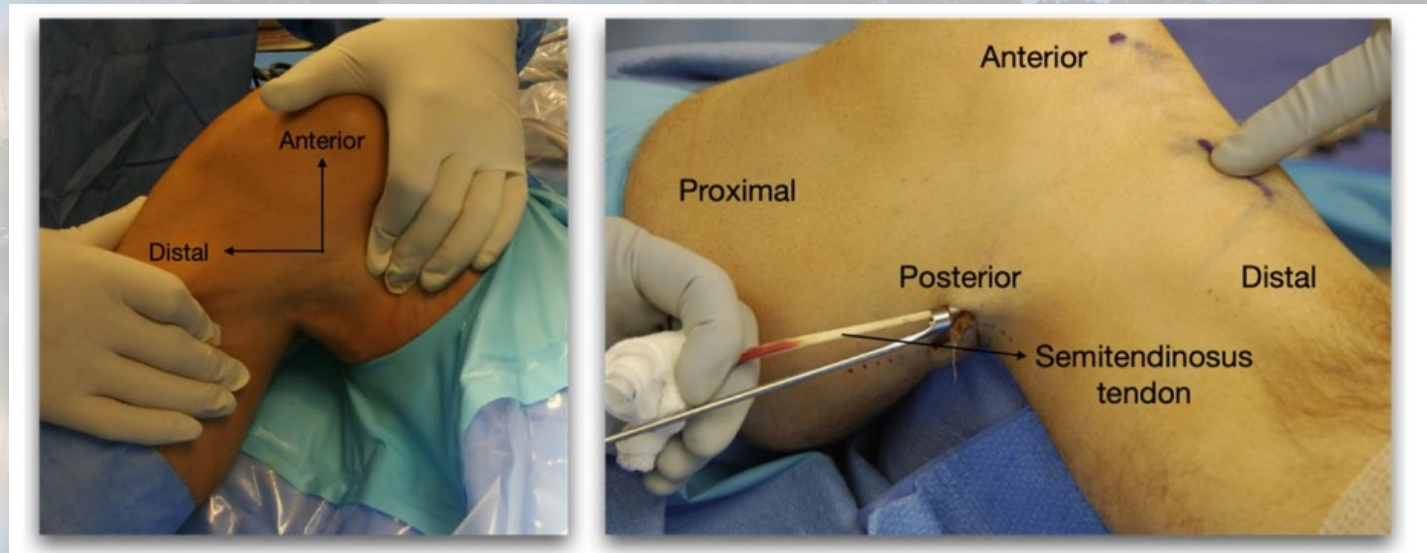
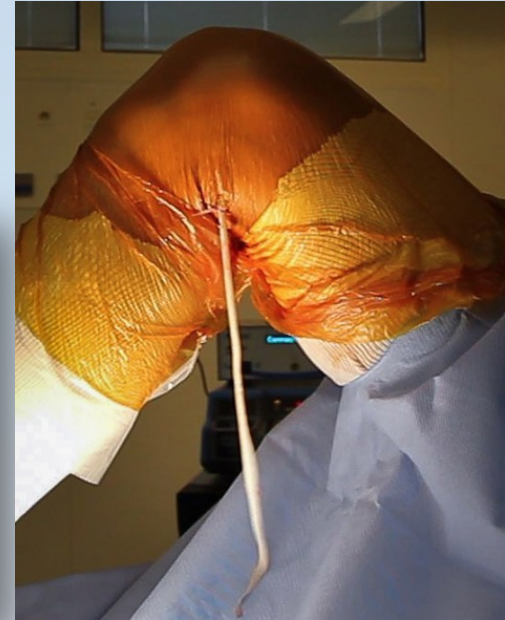
Saphenous nerve injury during hamstring tendons harvest: Does the incision matter? A systematic review

Knee | Published: 23 June 2016



Posterior approach

- No sensory loss
- Useful in large patients to avoid short harvest
- aesthetic satisfaction of the patient
- shorter hamstring harvest time



Tendon « dysplasia »

- Short harvested tendon
(*technical error / stripper choice*)

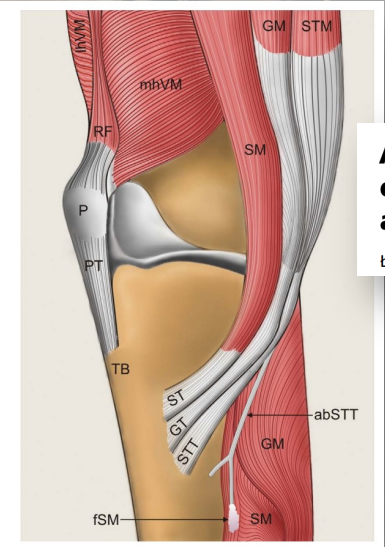
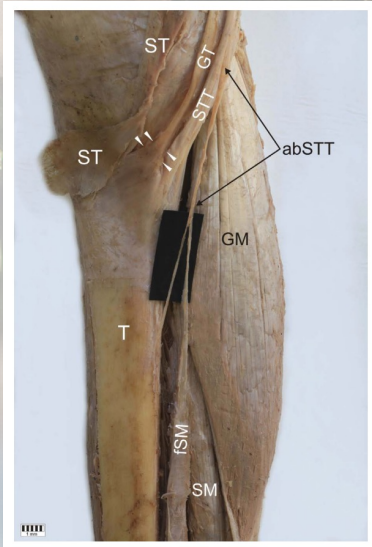


« Anatomic variation »

> *Knee*. 2013 Mar;20(2):90-5. doi: 10.1016/j.knee.2012.06.003. Epub 2012 Jul 4.

Anatomy of the bands of the hamstring tendon: how can we improve harvest quality?

Nicolas Reina¹, Olivier Abbo, Anne Gomez-Brouchet, Philippe Chiron, Jacques Moscovici, Jean-Michel Laffosse



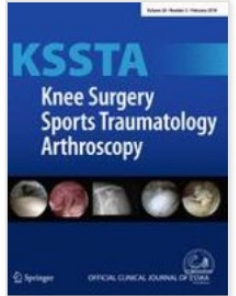
An unusual insertion of an accessory band of the semitendinosus tendon: case report and review of the literature

L. Olewnik¹, M. Podgórski², M. Polguj³

Infection

- @ time harvest
- Manipulation / preparation
- Contact with the skin

Contamination occurs during ACL graft harvesting and manipulation, but it can be easily eradicated



Zeitschrift: [Knee Surgery, Sports Traumatology, Arthroscopy](#) > Ausgabe 2/2018

Autoren: Daniel Pérez-Prieto, María E. Portillo, Raúl Torres-Claramunt, Xavier Pelfort, Pedro Hinarejos, Joan C. Monllau

Presoaking was performed with sterile gauze previously saturated with a vancomycin solution (5 mg/ml).

- Studies 2012 / 2014 / 2016 (larges samples)

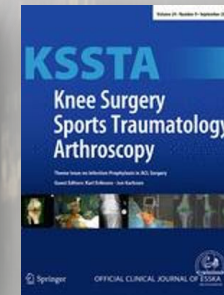
Knee Surg Sports Traumatol Arthrosc (2016) 24:2729–2735
DOI 10.1007/s00167-015-3558-z



KNEE

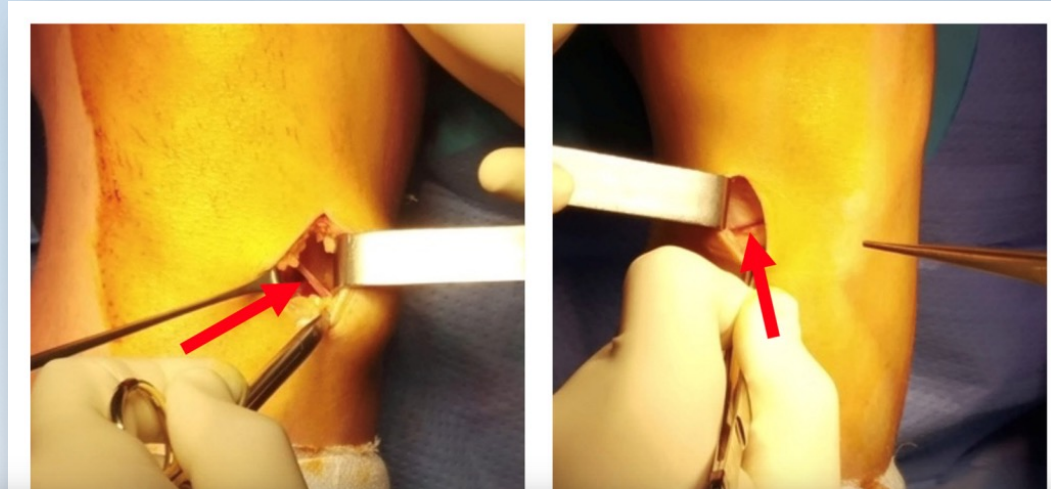
No infections in 1300 anterior cruciate ligament reconstructions with vancomycin pre-soaking of hamstring grafts

Michael Phegan¹ · Jane E. Grayson² · Christopher J. Vertullo³



Vascular complication

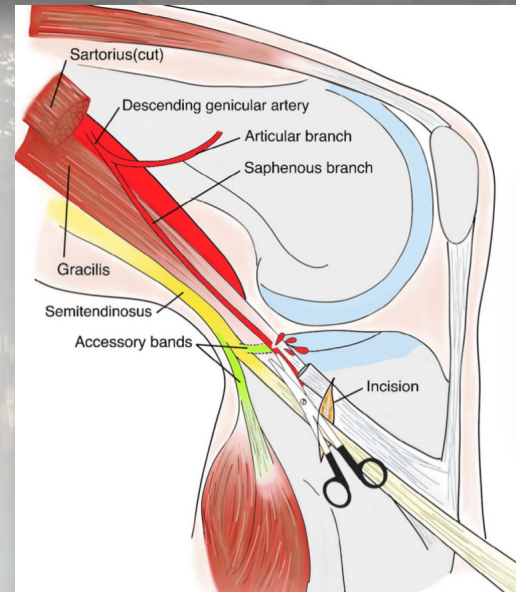
- **Hematoma** *identification of the branch of the inferior medial genicular artery*
- **Pseudoanevrysm** *The saphenous branch of genicular artery damaged with opened scissors*



Article

The Presence of a 'Sentinel' Vessel as an Anatomical Reference during Hamstring Tendon Harvesting—A Prospective Study

Radu Prejbeanu ¹, Mihail Lazar Mioc ¹ , Silviu Jelebean ², Andrei Balanescu ², Andrei-Marian Feier ^{3,*} , Tudor Sorin Pop ³ and Octav Russu ³ 



CASE REPORT

Open Access

Pseudoaneurysm following hamstring tendon harvest in arthroscopic anterior cruciate ligament reconstruction: a case report

Chung-Wei Ho^{1,2}, Shih-Han Lee^{1,2}, Shen-Han Wu^{1,2}, Chun-Yu Lin^{3,4}, Chian-Her Lee^{1,2} and Jia-Lin Wu^{1,2*} 



