

Minimal Invasive Endoscopic Technique for Achilles Tendon Reconstruction

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Present















Treatment options



Monro 1781













Multiple procedures:

- local tissue augmentation with triceps or plantaris tendon
- local tendon transfer (PB, FHL, FDL)
- synthetic materials,
- free tissue transfer (fascia lata, free flap, allografts).





Not so simple...



M, 29 y.o. Handball player 2-year history of Achilles tendinopathy









Neglected ruptures of the human Achilles tendon heal with scar tissue bridging the gap, but without a return to functional activity.

Insertional Achilles tendon rupture, generally partial and secondary to degenerative tendinopathy, especially in previously operated cases.





- neglected Achilles ruptures with end gap >6 cm
- neglected partial damage (> 50%) resulting from
 Achilles tendon dysfunction
- failure of previous conservative and surgical treatment

Achilles Tendon Reconstruction Using Autologous Hamstring Graft



m







- 2-year history of Achilles tendinopathy
- treated conservatively
- total Achilles tendon rupture





























3 months postoperatively









M, 22 y.o., professional soccer player

- 2-year history of Achilles tendinopathy with Haglund disease
- Conservative treatment no improvement
- Surgical treatment no improvement
- Subtotal insertional Achilles tendon rupture





M, 22 y.o., professional soccer player





M, 22 y.o., professional soccer player

3 months postoperatively









The Achilles Tendon Reconstruction Using Hamstring Graft

- from 2011 to 2013
- 14 patients, 15 Achilles tendons -

wound healing complications





- Midline skin incision

- Calcaneal tunnel:
- prox. footprint
- dist. anterior to the foot plantar fascia attachment













- skin incisions









- skin incisions

- restoring Achilles tendon continuity









- skin incisions

- restoring Achilles tendon continuity









- skin incisions

- restoring Achilles tendon continuity









- skin incisions

- restoring Achilles tendon continuity









- skin incisions
- restoring Achilles tendon continuity
- Thompson test









Results

	Open surgery	Endos
No.	15	
Follow-up	4 years	6
ATRS	11.2	
VAS pain	0.5	
VAS satisfaction	10	
AOFAS	96.3	
<u>ب</u>	チュ	3







F, 28 y.o. Achilles ossification, chronic renal failure

VAS pain – 2 points

VAS satisfaction – 10 points

ATRS - 16/100

AOFAS - 90/100













F, 28 y.o. Achilles ossification, chronic renal failure



















Conclusion













The Achilles tendon reconstruction using

autologous hamstring grafts provides good

functional outcomes.







Thank You for your attention.

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