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When Can I Return to Sports?

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Disclosure

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- Partner, BESPA Global
- Orthosolutions, Design Team Member
- ACFAS, Speaker

Management of Expectations


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- "What do you want to get back to?"
- Operative versus Non-operative Treatment
- Can we predict if you will be able to return to sport?
- Elite Athlete Expectations



Tegner Activity Scale



TAS	Activities
10	Competitive sports: soccer, football, rugby (national elite)
9	Competitive sports: soccer, football, rugby (lower divisions), ice hockey, wrestling, gymnastics, basketball
8	Competitive sports: racquetball or bandy, squash or badminton, track and field athletics (jumping, etc), downhill skiing
7	Competitive sports: tennis, running, motorcars speedway, handball
6	Recreational sports: soccer, football, volleyball, ice hockey, basketball, squash, racquetball, running
5	Recreational sports: tennis and badminton, handball, downhill skiing, jogging at least 5 times per week Work: heavy labor (construction, etc)
4	Competitive sports: cycling, cross-country skiing Recreational sports: gymnastics, jogging on uneven ground at least twice weekly Work: moderately heavy labor (eg, truck driving)
3	Work: light labor (eg, nursing)
2	Work: light labor
1	Work: sedentary (eg, secretarial)
0	Sick leave or disability pension

Tegner Y, Lysholm J. Rating systems in the evaluation of knee ligament injuries. *Clin Orthop.* 1985;(198):43-49.

Return to Sport and Patient Satisfaction at 5-Year Follow-up After Nonoperative Treatment for Acute Achilles Tendon Rupture



Purpose


- Assess 5-year return to sport and subjective satisfaction
- Minimum 1-year functional outcomes
- Complications in patients following nonoperative treatment of Achilles tendon rupture with early weightbearing rehabilitation




Methods

- Retrospective observational study (89 patients)

Foot & Ankle International. 2020, Vol. 41(7) 784-792

Return to Sport and Patient Satisfaction at 5-Year Follow-up After Nonoperative Treatment for Acute Achilles Tendon Rupture




Week 1 - 6	Week 6 - 12	Week 12 - 6 months
		
Short ankle cast 20° equinus position	Kienbock Ortho Rehab *	
Immediate fully weight-bearing	Stepwise reduction of insertable heel inlay	
Physical Therapy Protocol Stabilization & Coordination Prevention of atrophy	Regain range of motion	Peak strength & individual conditioning

permission to high-impact sport

Foot & Ankle International. 2020, Vol. 41(7) 784-792

Return to Sport and Patient Satisfaction at 5-Year Follow-up After Nonoperative Treatment for Acute Achilles Tendon Rupture



- All but one of them were recreational athletes
- “We cannot comment on the use of this protocol with elite athletes”
- Restriction of nonoperative treatment to patients presenting within 48 hours after injury, and the authors recommended surgery to those presenting later
- Conversion to surgery was proposed after 2 weeks, at the first clinical follow-up, when no initial signs of healing (stumps moving together) of the tendon were observed

Foot & Ankle International. 2020, Vol. 41(7) 784–792

Can I return to sports?





Eighty-two per cent of male professional football (soccer) players return to play at the previous level two seasons after Achilles tendon rupture treated with surgical repair

Alberto Grassi, MD, Camillo de Rossi, Peter D'Hooghe, MD, Benedetto Anzi, MD, Massimo Motta, Kristian Samuelsen, Stefano Zaffagnini

Purpose

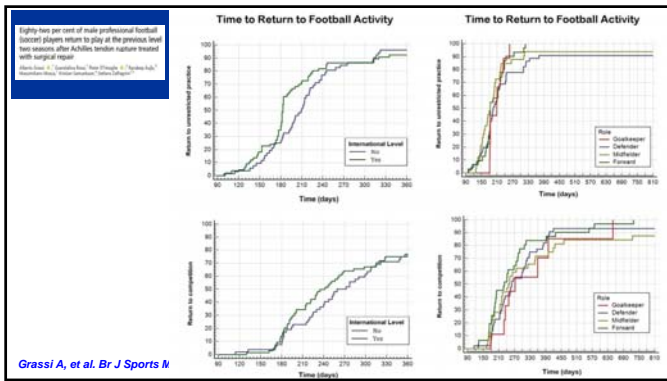
- To evaluate the time to return to playing following acute Achilles tendon rupture (ATR) and surgical repair in professional male football (soccer) players.

Methods

- Professional male soccer players who sustained an ATR and underwent surgical repair
- Athletes who competed for at least two seasons after returning to play, re-ruptures and number of matches played were reported
- 118 athletes (mean age 27.2±7.2 years) were included

Grassi A, et al. Br J Sports Med 2020;54:480–486. doi:10.1136/bjsports-2019





Eighty-two per cent of male professional football (soccer) players return to play at the previous level two seasons after Achilles tendon rupture treated with surgical repair

Alberto Grassi, J. Guadalupe Rosal, Peter O'Shea, F. Bartolo Aguilá, Wassimane Mena, Kristian Samuelsen, Stefano Collagrosso

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DUBLIN CITY UNIVERSITY

Results

- 113 (96%) returned to unrestricted practice after a mean of 199±53 days, with faster recovery in players involved in national teams
- Return to competition was after a mean of 274±114 days
- 76 athletes with at least two seasons of follow-up, 14 (18%) did not compete at the pre-injury level
- 6 players (8%) sustained a re-rupture within the first two seasons after return to play
- 4 re-ruptures were in footballers who returned to play <180 days after injury
- Age >30 years and re-ruptures had higher odds ratios of not returning to the same level of play

Grassi A, et al. Br J Sports Med 2020;54:480–486. doi:10.1136/bjsports-2019

Can we help predict return to sport?

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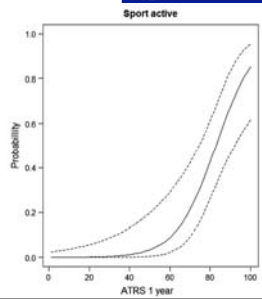
PESSIMISM
AS REAL AS IT GETS

Achilles tendon Total Rupture Score at 3 months can predict patients' ability to return to sport 1 year after injury

Marie Svensson¹, Hansson¹, Marlene Christensen², Thomas Rudolph³,
Thomas Erik Östergaard⁴, Thomas Kallman⁵, Anders Trøstevik⁶,
Knut Erik Winklerby⁷, Barbel⁸



- Probability Plot
- "ATRS at 3 months can be used as a predictor of the patient's ability to return to sports after 1 year"
- "ATRS might help to individualize rehabilitation by identifying patients who do not respond adequately to the chosen treatment"



Knee Surg Sports Traumatol Arthrosc (2016) 24:1365–1371

Take Home Points

- Expectations
- Honest
- Refine Rehabilitation



Thank You