

GP MeeThink: Blessures bij de recreatieve sporter en hoe ze te voorkomen – Focus op het onderste lidmaat



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Chronische blessures

- 'Overbelastingsblessures'

- Peesproblematiek
- BSI (bone stress injury)
 - MTSS
 - Stressfractuur
 - Low risk
 - High risk
- CECS (chronic exertional compartment syndrome)

Chronische blessures

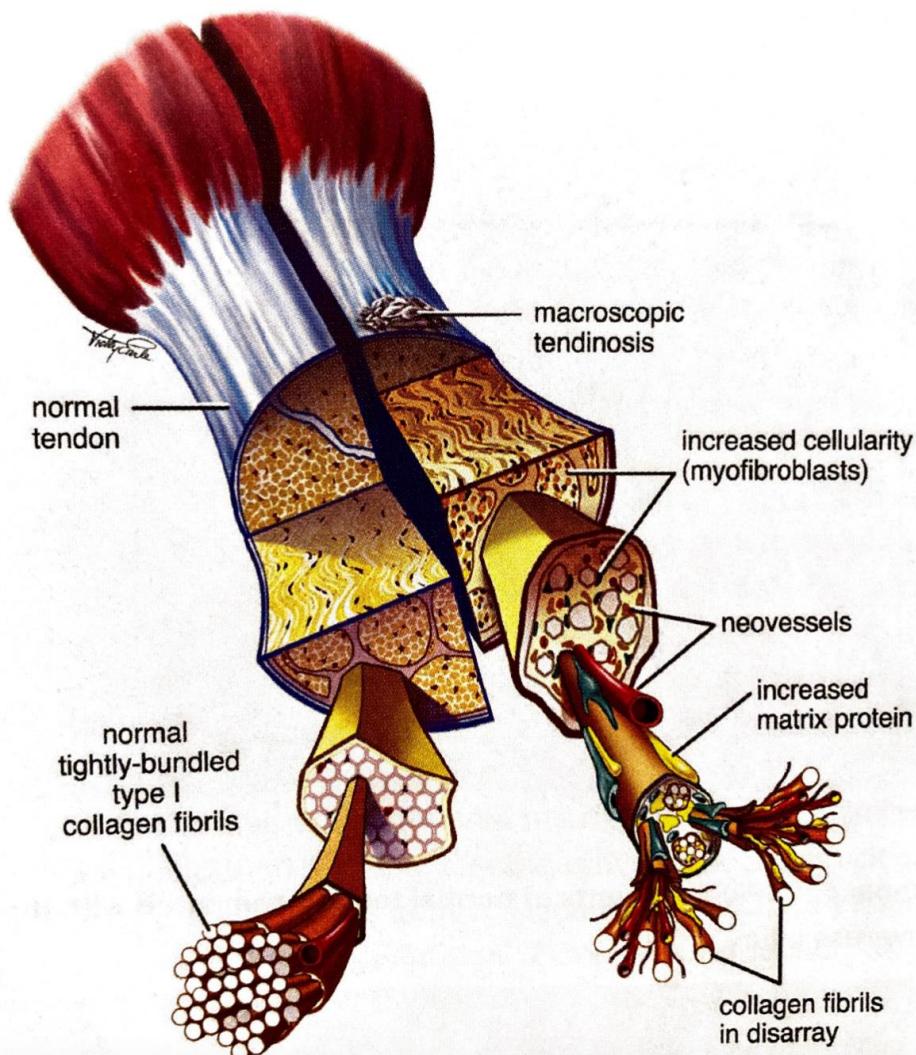
● 'Overbelastingsblessures'

➤ Peesproblematiek

- Fascia plantaris
- Achillespees
- Patellapees (Quadricepspees)
- Gluteus medius/minimus
- ITB
- Proximale hamstring ('conjoint tendon')
- Iliopsoas
- Tib posterior, peronei, tib anterior
- Popliteus

Pathofysiologie

- Degeneratie / gefaalde heling
 - Desorganisatie collageen
 - Verhoogde grondsubstantie (ECM)
 - Neovascularisatie
- Tendinose ipv 'tendinitis'

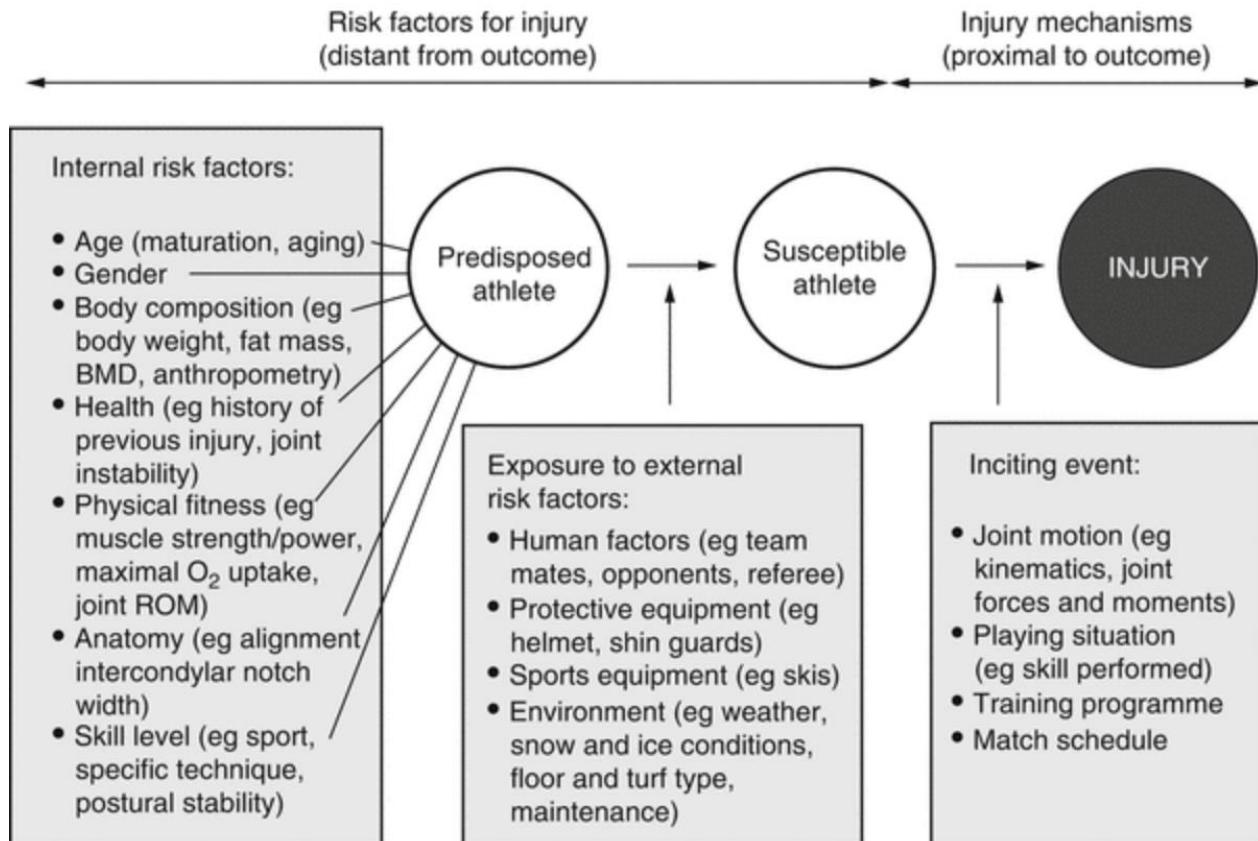


Patho-etiologie

- OVERLOAD

'too much too soon'

- INDIVIDUELE RF



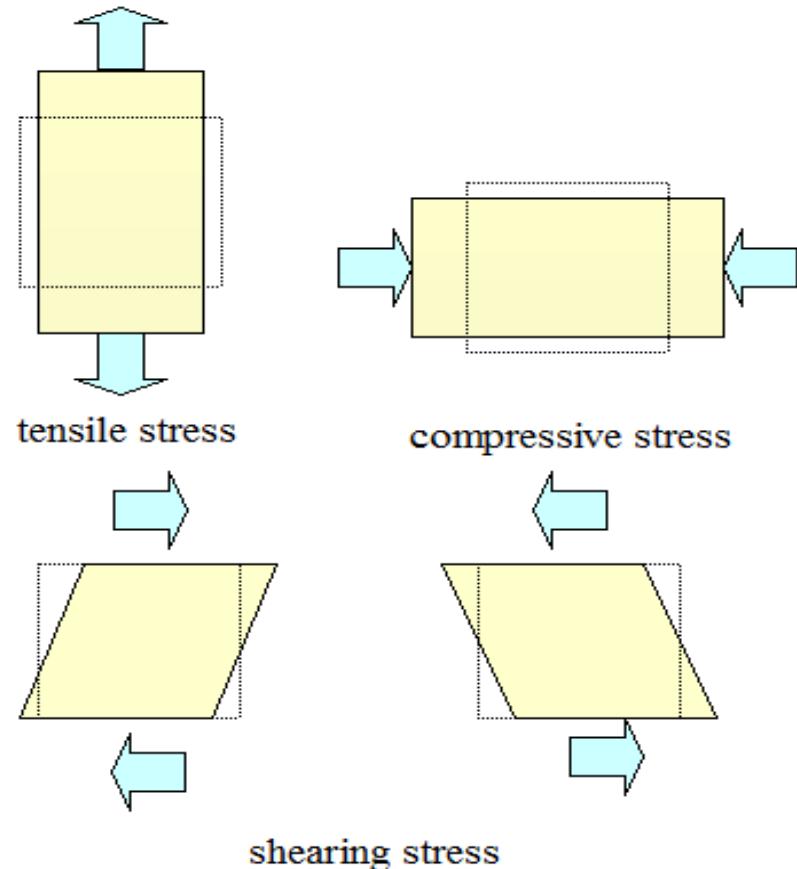
Patho-etiologie

- OVERLOAD

- LOAD

- Trekbelasting
 - Drukbelasting
 - Frictiebelasting

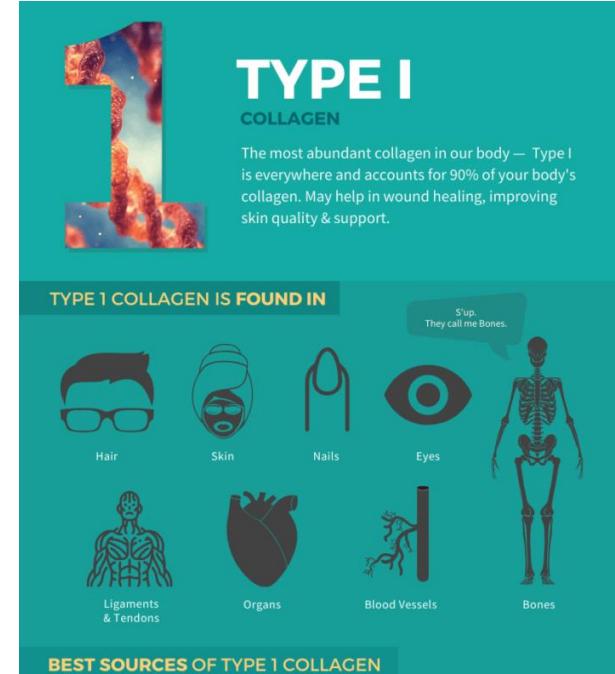
- Stress, slaap,..



Patho-etiologie

● INDIVIDUELE RF

- Leeftijd, man (activiteiten/oestrogeen)
- Genetisch
 - verklaart variatie in individuele vatbaarheid/herstel
 - genetic markers (COL-type)
- BMI
- ROM
- Chronische inflammatoire ziekte (> 1 blessure)
- Metabool: Jicht, hypercholesterolemie
- Quinolones



Diagnostiek

- Kliniek!
 - Meten is weten
- Echo
 - Opzetting, hypo-echogene zone, calcificatie, cleft,
 - Power Doppler: neovascularisatie
- MR
 - DD. andere pathologie (bursa, bot, ..)

Kliniek

- Anamnese:
 - overbelastings- / chronische blessure
 - Stijfheid/pijn bij aanvang ('opwarmbaar')
 - + nà belasting (volgende morgen – 24u effect)
- KOZ:
 - Focale drukpijn
 - Zwelling
 - Aanspanpijn



Diagnostiek

Kliniek!

➤ Meten is weten

● VISA

VICTORIAN INSTITUTE OF SPORT

1. For how many minutes can you sit pain free?

0 mins 100 mins Points

0 1 2 3 4 5 6 7 8 9 10

2. Do you have pain walking downstairs with a normal gait cycle?

strong severe no pain Points
pain 0 1 2 3 4 5 6 7 8 9 10

3. Do you have pain at the knee with full active non-weightbearing knee extension?

strong severe no pain Points
pain 0 1 2 3 4 5 6 7 8 9 10

4. Do you have pain when doing a full weight bearing lunge?

strong severe no pain Points
pain 0 1 2 3 4 5 6 7 8 9 10

5. Do you have problems squatting?

Unable no problems Points
0 1 2 3 4 5 6 7 8 9 10

6. Do you have pain during or immediately after doing 10 single leg hops?

strong severe no pain Points
pain/unable 0 1 2 3 4 5 6 7 8 9 10

7. Are you currently undertaking sport or other physical activity?

0 Not at all

4 Modified training ± modified competition

7 Full training ± competition but not at same level as when symptoms began

10 Competing at the same or higher level as when symptoms began

Please complete EITHER A, B or C in this question.

You have **no pain** while undertaking sport please complete **Q8a only**.

You have **pain while undertaking sport but it does not stop you** from competing, please complete **Q8b only**.

You have **pain that stops you from completing sporting activities**, please complete **Q8c only**.

If you have **no pain** while undertaking sport, for how long can you train/practise?

NIL	1-5 mins	6-10 mins	7-15 mins	>15 mins
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<input type="checkbox"/>	Points <input type="checkbox"/>				
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0	7	14	21	30
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If you have some pain while undertaking sport, but it does not stop you from completing your training/practice for how long can you train/practise?

NIL	1-5 mins	6-10 mins	7-15 mins	>15 mins
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<input type="checkbox"/>				
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0	4	10	14	20	Points <input type="checkbox"/>
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If you have **pain which stops you** from completing your training/practice for how long can you train/practise?

NIL	1-5 mins	6-10 mins	7-15 mins	>15 mins
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<input type="checkbox"/>				
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0	2	5	7	10	Points <input type="checkbox"/>
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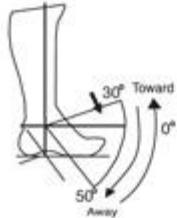
TOTAL VISA SCORE

Diagnostiek

- Kliniek!
 - Meten is weten
 - Bidex

ANKLE

PLANTAR/DORSIFLEXION

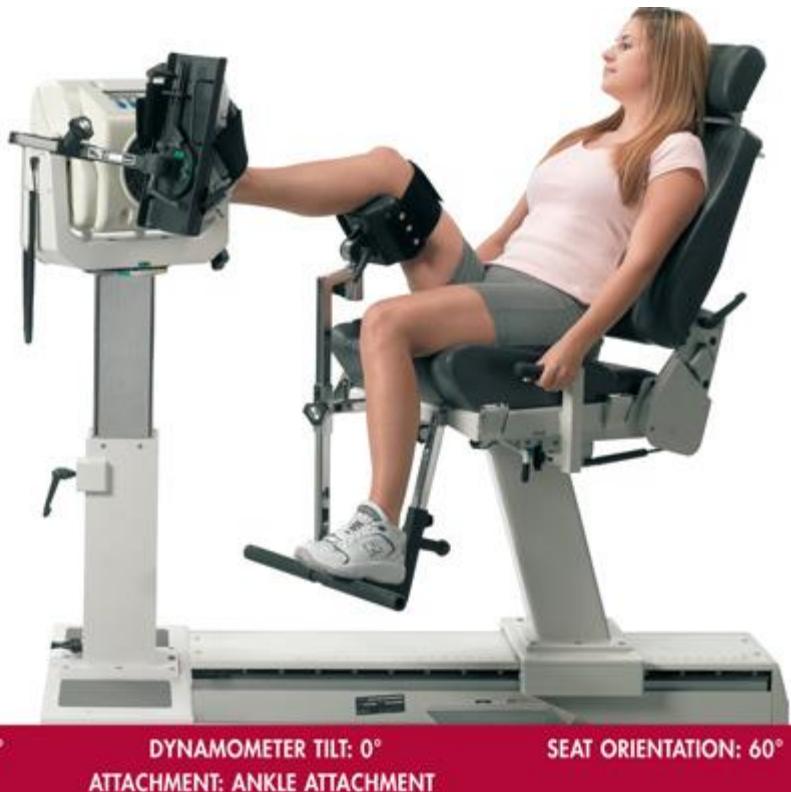


In neutral position, axis of rotation passes through the body of talus, fibular malleolus, and through or just below the tibial malleolus.

AWAY: Plantarflexion

TOWARD: Dorsiflexion

READY POSITION: Full Dorsiflexion
(20 - 30° Knee Flexion)



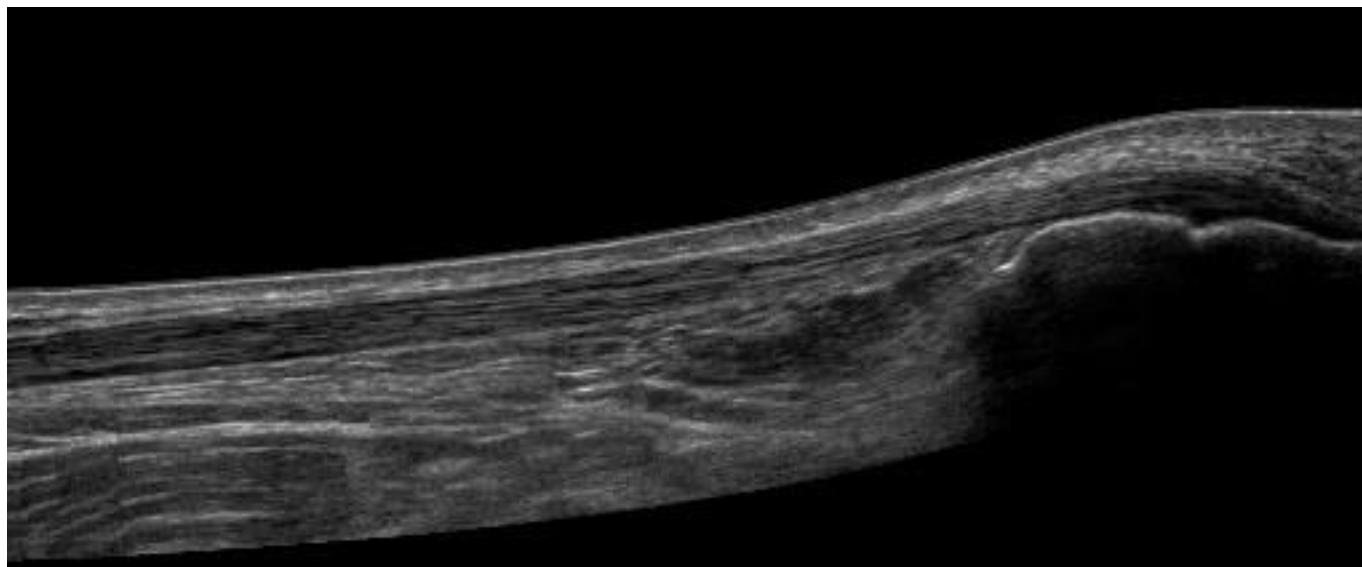
DYNAMOMETER ORIENTATION: 65°

DYNAMOMETER TILT: 0°
ATTACHMENT: ANKLE ATTACHMENT

SEAT ORIENTATION: 60°

Diagnostiek

- Echo
 - Opzetting, hypo-echogene zone, calcificatie, cleft,
 - Power Doppler: neovascularisatie



Diagnostiek

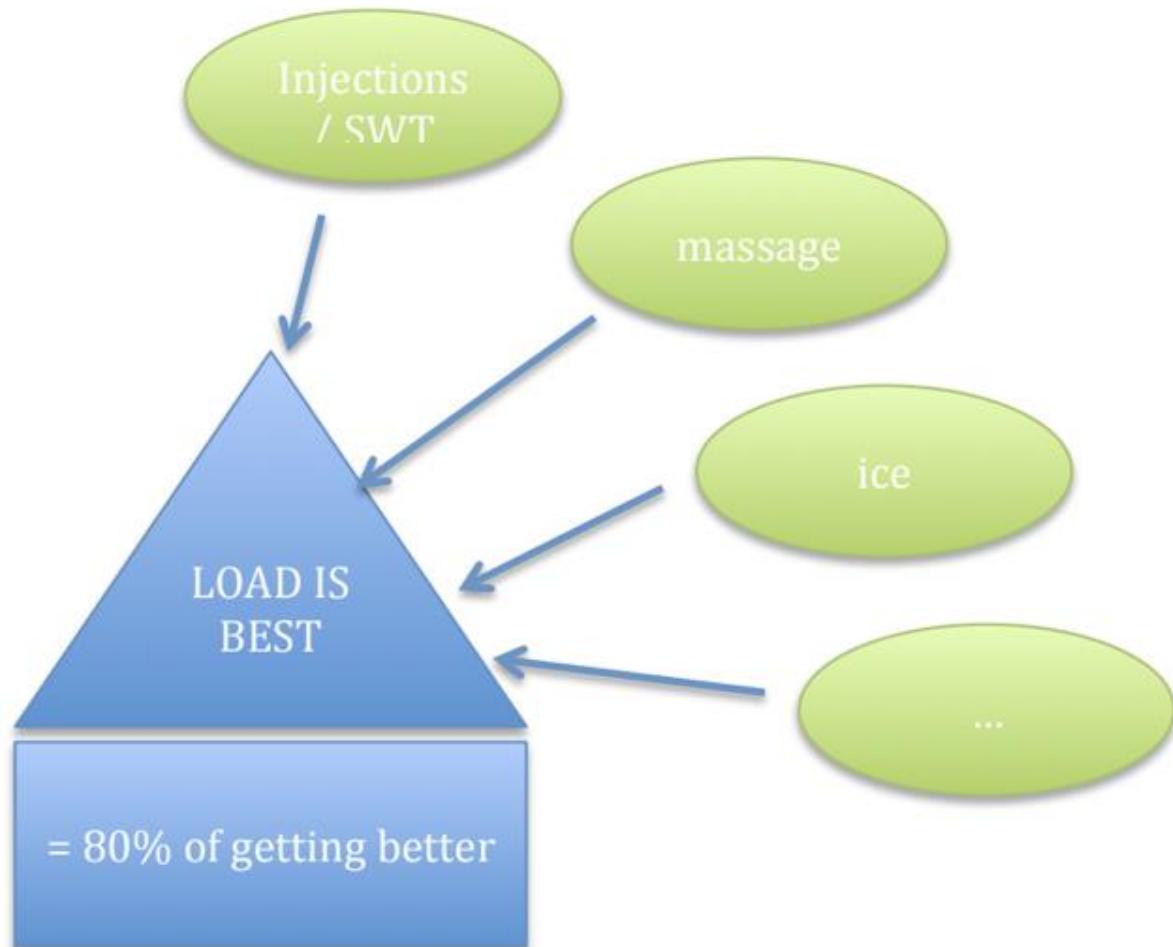
● MR

DD (weke delen/bot)



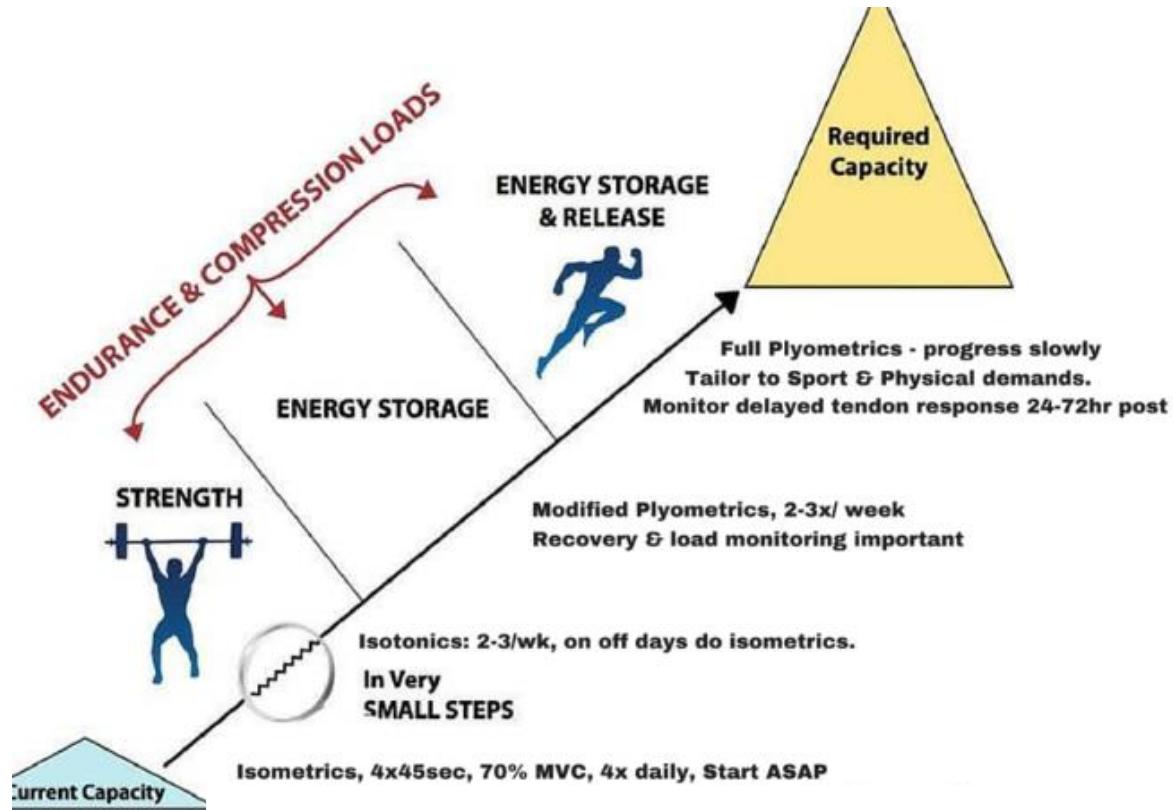
Behandeling

- Educatie
- Load management
- Rehab
- Infiltraties
- ESWT
- Medicatie
- supplementen



Behandeling

- Rehab
 - Geïndividualiseerd
 - Progressief
 - Isometrisch
 - Isotoon
 - Plyometrie
 - Belastbaarheid
 - Pees
 - kinetische keten
 - Mechanotransductie
 - Gen upregulatie
 - Proteïne synthese



Behandeling

- Rehab

- Denk aan / behandel mee:

- Neuromotore controle
 - Psychosociaal
 - Vermijdingsgedrag
 - Malcognities (pijn = schade, ...)
 - Stress
 - Slaap
 - Metabool (obesitas)

Behandeling

- Educatie
- Load management
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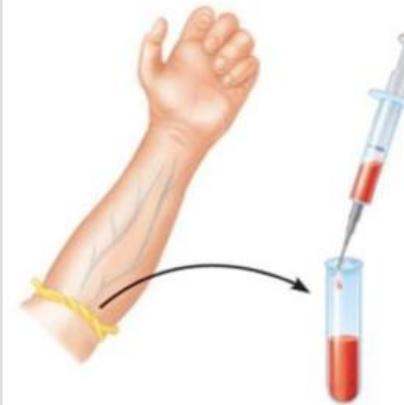
Behandeling

- Infiltraties

	Wat	Evidentie	Wanneer
	Sclerosans (polidocanol, Aethoxysclerol®)	+	Neovascularisatie Persisterende klachten
	PRP (platelet rich plasma)	+-	Degeneratieve intra-tendineuze cleft
	Corticosteroïd (methylprednisolone, Depo-Medrol®)	+ (korte termijn!) Nooit intra-tendineus!	Sterk reactief bursitis
	Lokaal anaestheticum / Saline	+-	Volume-effect, stripping
	Prolotherapie (dextrose)	+- (vaak 4 behandelingen)	Chronische persisterende klachten

Behandeling

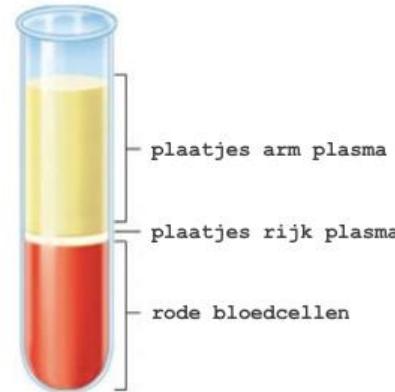
PRP



Stap 1: bloedafname



Stap 2: centrifuge



Behandeling

- ESWT

- Kinetische energie
- Samengeperste lucht
- Upregulatie tenocyt
- Procollageen synthese
- Hyperstimulatie analgesie
- Fragmenteren calcificatie

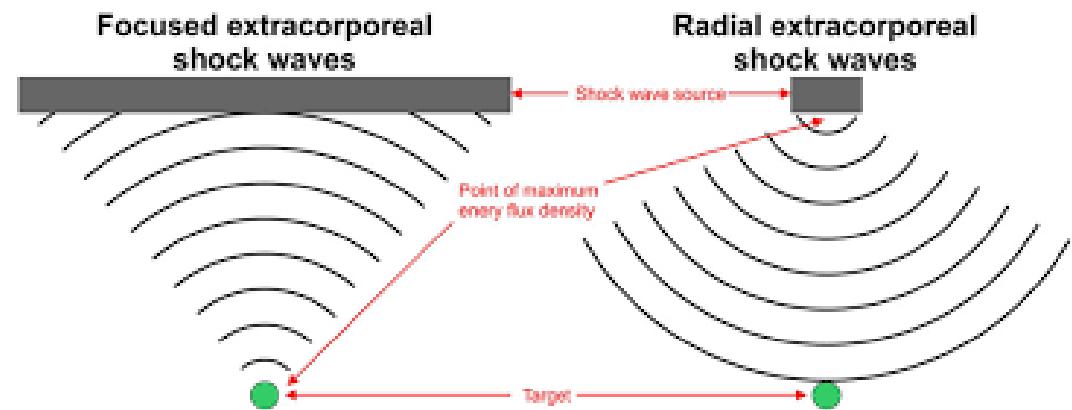
Clinical application of shock wave therapy (SWT) in musculoskeletal disorders

F. IOPPOLO¹, J. D. ROMPE², J. P. FURIA³, A. CACCHI⁴

- Fasciosis plantaris
- Insertionele achillespees tendinopathie
- Calciërende cuff tendinopathie
- Patellapees tendinopathie
- Adductoren tendinopathie
- Gluteus tendinopathy
- MTSS
- Non-union.

Behandeling

- ESWT



Behandeling

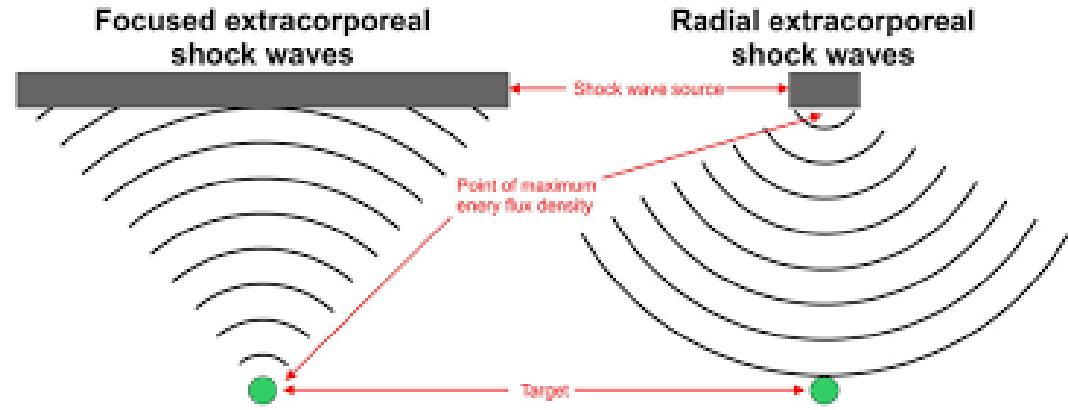


■ SHOULDER AND ELBOW

Radial extracorporeal shock-wave therapy in patients with chronic rotator cuff tendinitis

A PROSPECTIVE RANDOMISED DOUBLE-BLIND PLACEBO-CONTROLLED MULTICENTRE TRIAL

In conclusion, low-dose rESWT does not seem to be effective compared with placebo in reducing symptoms in patients with chronic rotator cuff tendinitis and we cannot recommend this form of treatment in these patients.

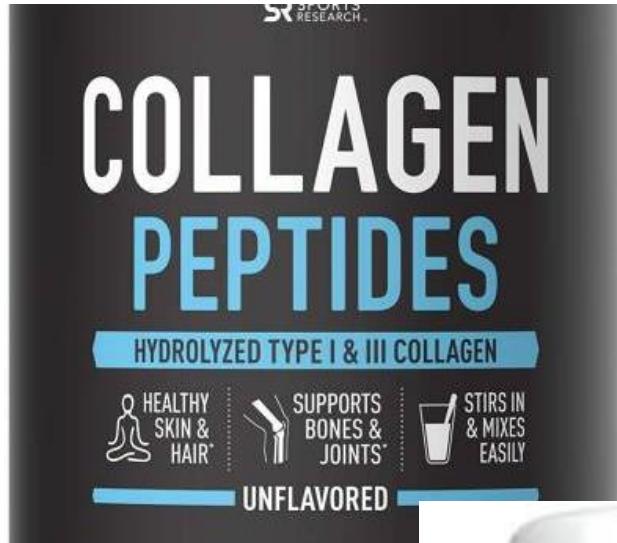


Behandeling

- Collageen supplementatie

Oral Supplementation of Specific Collagen Peptides Combined with Calf-Strengthening Exercises Enhances Function and Reduces Pain in Achilles Tendinopathy Patients

Stephan F.E. Praet 1,2,* , Craig R. Purdam 3, Marijke Welvaert 1,2, Nicole Vlahovich 1, Gregg Lovell 1, Louise M. Burke 4, Jamie E. Gaida 2,5, Silvia Manzanero 1 , David Hughes 1 and Gordon Waddington 1,2



Behandeling

● Medicatie

- It seems evident that ibuprofen treatment, in persons with Achilles tendinopathy, does not initiate a reparative response in the affected tendon tissue and that the potential pain relief is moderate
- In view of this, and considering the well-known side effects of NSAID treatment (4), the use of NSAIDs cannot be recommended as treatment in Achilles tendinopathy. If NSAIDs are chosen as treatment, the use of topical NSAID gels may be preferable to systemic treatment since adverse events are lower, and the efficacy seems comparable in musculoskeletal conditions in which NSAIDs do have a pain-reducing effect (4). However, on the basis of the current data, there is no reason to anticipate any major beneficial effect of NSAID gels in the treatment of Achilles tendinopathy. Finally, it cannot be excluded that other NSAID types that differ from ibuprofen, such as specific COX-2 inhibitors, could have a beneficial effect in treatment of Achilles tendinopathy, although the complete lack of tendon cell response to ibuprofen suggests a limited effect of COX inhibition, in general.