



Fysioterapi til idrætsudøvere med overbelastede sener

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1. Cook JL, Khan KM, Harcourt PR, Grant M, Young DA, Bonar SF. *A cross sectional study of 100 athletes with jumper's knee managed conservatively and surgically*. The Victorian Institute of Sport Tendon Study Group. Br J Sports Med. 1997;31(4):332-6.
2. Kettunen JA, Kvist M, Alanen E, Kujala UM. *Long-Term Prognosis for Jumper's Knee in Male Athletes: A Prospective Follow-up Study*. Am J Sports Med. 2002;30(5):689-92.
3. Kujala UM, Sarna S, Kaprio J. *Cumulative incidence of achilles tendon rupture and tendinopathy in male former elite athletes*. Clin J Sport Med. 2005;15(3):133-5.
4. Lopes AD, Hespanhol Junior LC, Yeung SS, Costa LO. *What are the main running-related musculoskeletal injuries? A Systematic Review*. Sports Med. 2012;42(10):891-905.
5. Lian OB, Engebretsen L, Bahr R. *Prevalence of jumper's knee among elite athletes from different sports: a cross-sectional study*. Am J Sports Med. 2005;33(4):561-7.
6. Svensson RB, Heinemeier KM, Couppe C, Kjaer M, Magnusson SP. *The effect of aging and exercise on the tendon*. J Appl Physiol (1985). 2016;jap 00328 2016.
7. Magnusson SP, Kjaer M. *The impact of loading, unloading, ageing and injury on the human tendon*. J Physiol. 2019;597(5):1283-98.
8. Heinemeier KM, Schjerling P, Heinemeier J, Magnusson SP, Kjaer M. *Lack of tissue renewal in human adult Achilles tendon is revealed by nuclear bomb (14)C*. FASEB J. 2013;27(5):2074-9.
9. Heinemeier KM, Schjerling P, Ohlenschlaeger TF, Eismark C, Olsen J, Kjaer M. *Carbon-14 bomb pulse dating shows that tendinopathy is preceded by years of abnormally high collagen turnover*. FASEB J. 2018;32(9):4763-75.
10. Couppe C, Kongsgaard M, Aagaard P, Vinther A, Boesen M, Kjaer M, et al. *Differences in tendon properties in elite badminton players with or without patellar tendinopathy*. Scand J Med Sci Sports. 2013;23(2):e89-95.
11. Couppe C, Suetta C, Kongsgaard M, Justesen L, Hvid LG, Aagaard P, et al. *The effects of immobilization on the mechanical properties of the patellar tendon in younger and older men*. Clin Biomech (Bristol, Avon). 2012;27(9):949-54.
12. Magnusson SP, Langberg H, Kjaer M. *The pathogenesis of tendinopathy: balancing the response to loading*. Nat Rev Rheumatol. 2010;6(5):262-8.
13. Millar NL, Murrell GA, McInnes IB. *Inflammatory mechanisms in tendinopathy - towards translation*. Nat Rev Rheumatol. 2017;13(2):110-22.
14. Couppe C, Svensson RB, Silbernagel KG, Langberg H, Magnusson SP. *Eccentric or Concentric Exercises for the Treatment of Tendinopathies?* J Orthop Sports Phys Ther. 2015:1-25.
15. Sussmilch-Leitch SP, Collins NJ, Bialocerkowski AE, Warden SJ, Crossley KM. *Physical therapies for Achilles tendinopathy: systematic review and meta-analysis*. J Foot Ankle Res. 2012;5(1):15.
16. Yelland MJ, Sweeting KR, Lyftogt JA, Ng SK, Scuffham PA, Evans KA. *Prolotherapy injections and eccentric loading exercises for painful Achilles tendinosis: a randomised trial*. Br J Sports Med. 2011;45(5):421-8.



17. Knobloch K, Kraemer R, Jagodzinski M, Zeichen J, Meller R, Vogt PM. *Eccentric training decreases paratenon capillary blood flow and preserves paratendon oxygen saturation in chronic achilles tendinopathy*. J Orthop Sports Phys Ther. 2007;37(5):269-76.
18. Larsson ME, Kall I, Nilsson-Helander K. *Treatment of patellar tendinopathy--a systematic review of randomized controlled trials*. Knee Surg Sports Traumatol Arthrosc. 2012;20(8):1632-46.
19. Rompe JD, Nafe B, Furia JP, Maffulli N. *Eccentric loading, shock-wave treatment, or a wait-and-see policy for tendinopathy of the main body of tendo Achillis: a randomized controlled trial*. Am J Sports Med. 2007;35(3):374-83.
20. Mani-Babu S, Morrissey D, Waugh C, Screen H, Barton C. *The effectiveness of extracorporeal shock wave therapy in lower limb tendinopathy: a systematic review*. Am J Sports Med. 2015;43(3):752-61.
21. Alfredson H, Pietila T, Jonsson P, Lorentzon R. *Heavy-Load Eccentric Calf Muscle Training For the Treatment of Chronic Achilles Tendinosis*. Am J Sports Med. 1998;26(3):360-6.
22. Gravare Silbernagel K, Vicenzino BT, Rathleff MS, Thorborg K. *Isometric exercise for acute pain relief: is it relevant in tendinopathy management?* Br J Sports Med. 2019;53(21):1330-1.
23. Heinemeier KM, Olesen JL, Schjerling P, Haddad F, Langberg H, Baldwin KM, et al. *Short-term strength training and the expression of myostatin and IGF-I isoforms in rat muscle and tendon: differential effects of specific contraction types*. J Appl Physiol. 2007;102(2):573-81.
24. Garma T, Kobayashi C, Haddad F, Adams GR, Bodell PW, Baldwin KM. *Similar acute molecular responses to equivalent volumes of isometric, lengthening, or shortening mode resistance exercise*. J Appl Physiol (1985). 2007;102(1):135-43.
25. Wasielewski NJ, Kotsko KM. *Does eccentric exercise reduce pain and improve strength in physically active adults with symptomatic lower extremity tendinosis? A systematic review*. J Athl Train. 2007;42(3):409-21.
26. Young MA, Cook JL, Purdam CR, Kiss ZS, Alfredson H. *Eccentric decline squat protocol offers superior results at 12 months compared with traditional eccentric protocol for patellar tendinopathy in volleyball players*. Br J Sports Med. 2005;39(2):102-5.
27. Frohm A, Halvorsen K, Thorstensson A. *Patellar tendon load in different types of eccentric squats*. Clin Biomech (Bristol, Avon). 2007;22(6):704-11.
28. Kongsgaard M, Aagaard P, Roikjaer S, Olsen D, Jensen M, Langberg H, et al. *Decline eccentric squats increases patellar tendon loading compared to standard eccentric squats*. Clin Biomech (Bristol, Avon). 2006;21(7):748-54.
29. Andersen LL, Magnusson SP, Nielsen M, Haleem J, Poulsen K, Aagaard P. *Neuromuscular activation in conventional therapeutic exercises and heavy resistance exercises: implications for rehabilitation*. Phys Ther. 2006;86(5):683-97.
30. Malliaras P, Barton CJ, Reeves ND, Langberg H. *Achilles and patellar tendinopathy loading programmes : a systematic review comparing clinical outcomes and identifying potential mechanisms for effectiveness*. Sports Med. 2013;43(4):267-86.



31. Kongsgaard M, Kovanen V, Aagaard P, Doessing S, Hansen P, Laursen AH, et al. *Corticosteroid injections, eccentric decline squat training and heavy slow resistance training in patellar tendinopathy*. Scand J Med Sci Sports. 2009;19(6):790-802.
32. Kongsgaard M, Qvortrup K, Larsen J, Aagaard P, Doessing S, Hansen P, et al. *Fibril morphology and tendon mechanical properties in patellar tendinopathy: effects of heavy slow resistance training*. Am J Sports Med. 2010;38(4):749-56.
33. Beyer R, Kongsgaard M, Hougs Kjaer B, Ohlenschlaeger T, Kjaer M, Magnusson SP. *Heavy Slow Resistance Versus Eccentric Training as Treatment for Achilles Tendinopathy: A Randomized Controlled Trial*. Am J Sports Med. 2015.
34. Silbernagel KG, Thomee R, Thomee P, Karlsson J. *Eccentric overload training for patients with chronic Achilles tendon pain--a randomised controlled study with reliability testing of the evaluation methods*. Scand J Med Sci Sports. 2001;11(4):197-206.
35. Silbernagel KG, Thomee R, Eriksson BI, Karlsson J. *Continued sports activity, using a pain-monitoring model, during rehabilitation in patients with Achilles tendinopathy: a randomized controlled study*. Am J Sports Med. 2007;35(6):897-906.
36. Visnes H, Hoksrud A, Cook J, Bahr R. *No effect of eccentric training on jumper's knee in volleyball players during the competitive season: a randomized clinical trial*. Clin J Sport Med. 2005;15(4):227-34.
37. Silbernagel KG, Crossley KM. *A Proposed Return-to-Sport Program for Patients With Midportion Achilles Tendinopathy: Rationale and Implementation*. J Orthop Sports Phys Ther. 2015;45(11):876-86.
38. Maffulli N, Testa V, Capasso G, Ewen SW, Sullo A, Benazzo F, et al. *Similar histopathological picture in males with Achilles and patellar tendinopathy*. Med Sci Sports Exerc. 2004;36(9):1470-5.
39. Andres BM, Murrell GA. *Treatment of tendinopathy: what works, what does not, and what is on the horizon*. Clin Orthop Relat Res. 2008;466(7):1539-54.
40. Coombes BK, Bisset L, Brooks P, Khan A, Vicenzino B. *Effect of corticosteroid injection, physiotherapy, or both on clinical outcomes in patients with unilateral lateral epicondylalgia: a randomized controlled trial*. JAMA. 2013;309(5):461-9.
41. Heinemeier KM, Ohlenschlaeger TF, Mikkelsen UR, Sonder F, Schjerling P, Svensson RB, et al. *Effects of anti-inflammatory (NSAID) treatment on human tendinopathic tissue*. J Appl Physiol (1985). 2017;123(5):1397-405.
42. Johannsen FE, Herzog RB, Malmgaard-Clausen NM, Hoegberget-Kalisz M, Magnusson SP, Kjaer M. *Corticosteroid injection is the best treatment in plantar fasciitis if combined with controlled training*. Knee Surg Sports Traumatol Arthrosc. 2018.
43. Al-Abbad H, Simon JV. *The effectiveness of extracorporeal shock wave therapy on chronic achilles tendinopathy: a systematic review*. Foot Ankle Int. 2013;34(1):33-41.