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New Approach to Handling Tendinopathies - Concurrent Workshop

Saturday, 17 August 2013

Start 4:30pm

Duration: 60mins

Picasso



South GP CME 2013

General Practice Conference & Medical Exhibition

15-18 August | Edgar Centre | Dunedin

New Approaches to Handling Tendinopathies

By Hamish Osborne

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Definition



- Tendinopathy
 - Absence of tightly packed collagen bundles
 - Large amount mucoid ground substance
 - Clefts in collagen suggesting microtearing
 - Neovascularisation
 - Histopathology is tendinosis

1882 *Lancet*; Morris H. The rider's sprain. 120(3074)



1976 *Am J Sports Med*; Puddu G, Ippolito E, Postacchini F. A classification of achilles tendon disease.



1986 Clin. Orthop. Relat. Res Stanish WD, Rubinovich RM, Curwin S. Eccentric exercises for chronic tendinitis.

- First to hypothesise down better than up



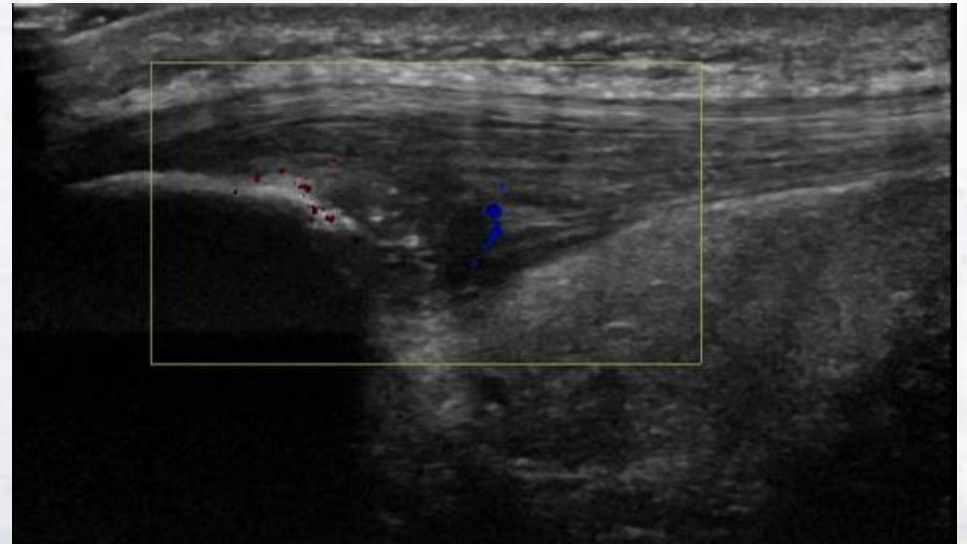
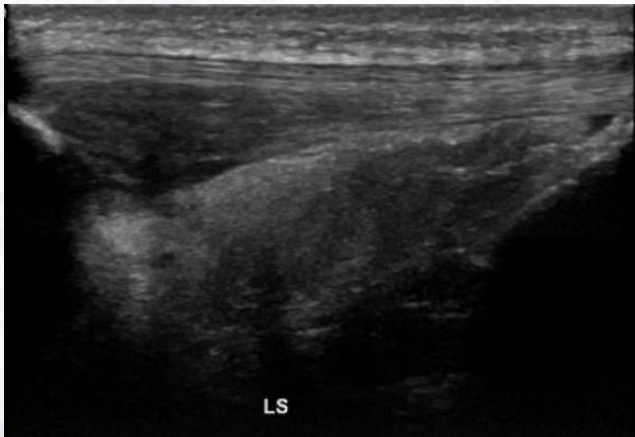
1998 Am J Sports Med. Alfredson H, Pietila T, Jonsson P, Lorentzon R. Heavy-load eccentric calf muscle training for the treatment of chronic Achilles tendinosis.



1998 Journal of Science and Medicine in Sport. Visentini PJ, Khan KM, Cook JL, Kiss ZS, Harcourt PR, Wark JD. The VISA score: An index of severity of symptoms in patients with jumper's knee (patellar tendinosis).



2000 J Ultrasound Med. Cook JL, Khan KM, Kiss ZS, Purdam CR, Griffiths L. Prospective imaging study of asymptomatic patellar tendinopathy in elite junior basketball players. J Ultrasound Med.



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**2001 Br J Sports Med Cook JL, Khan KM, Kiss ZS, Purdam CR, Griffiths L.
Reproducibility and clinical utility of tendon palpation to detect patellar tendinopathy in young basketball players. Victorian Institute of Sport tendon study group.**



2001 Br J Sports Med. Robinson JM, Cook JL, Purdam C, Visentini PJ, Ross J, Maffulli N, et al. The VISA-A questionnaire: a valid and reliable index of the clinical severity of Achilles tendinopathy.



**2002 Cochrane Database Syst Rev.
Brosseau L, Casimiro L, Milne S, Robinson
V, Shea B, Tugwell P, et al. Deep transverse
friction massage for treating tendinitis.**

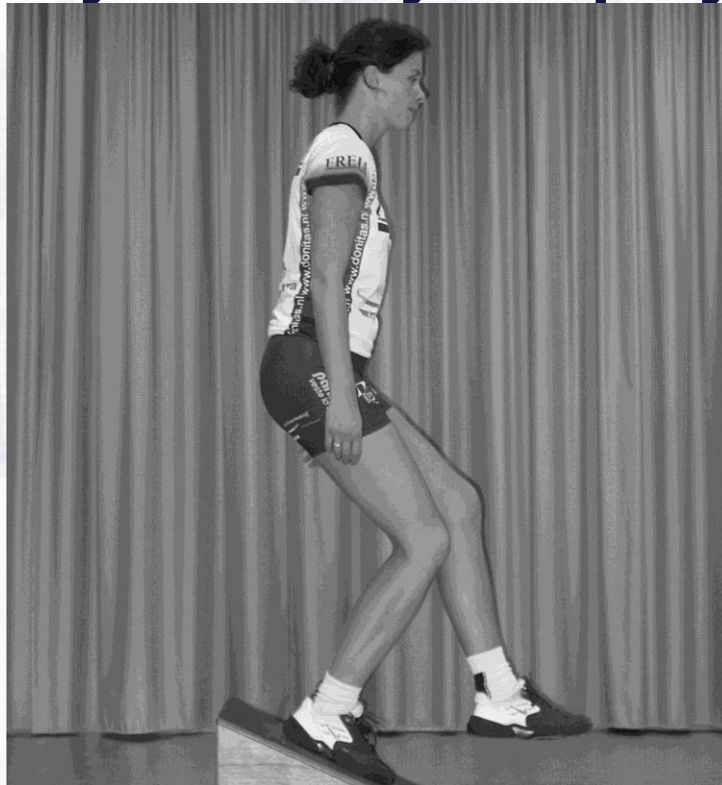
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2003 J Hand Surg (Am) Edwards SG, Calandruccio JH. Autologous blood injections for refractory lateral epicondylitis.



2005 Br J Sports Med 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.



**2006 Br J Sports Med Manias P,
Stasinopoulos D. A controlled clinical pilot
trial to study the effectiveness of ice as a
supplement to the exercise programme for
the management of lateral elbow
tendinopathy.**

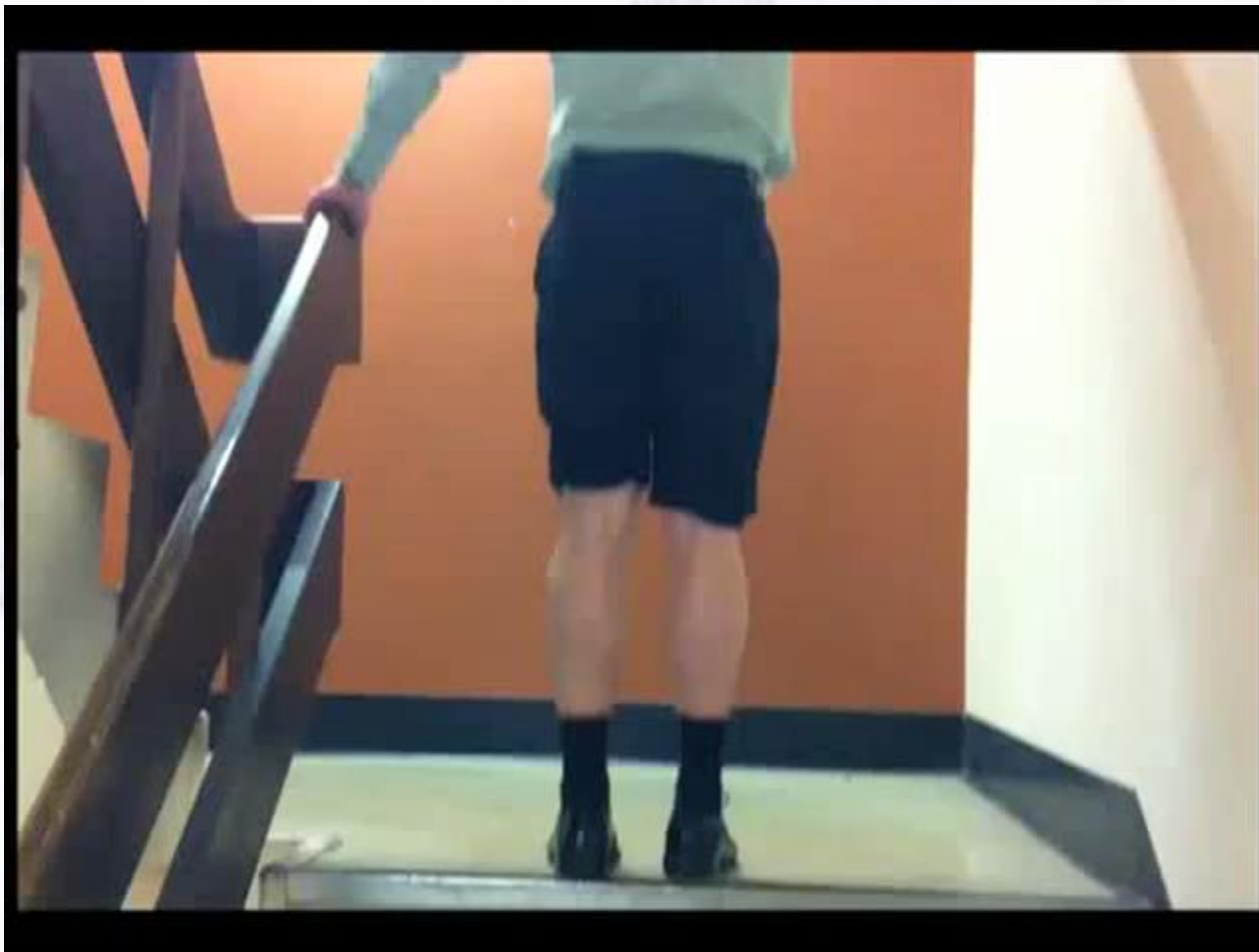
**2007 Am J Sports Med. Silbernagel KG,
Thomee R, Eriksson BI, Karlsson J.
Continued sports activity, using a pain-
monitoring model, during rehabilitation in
patients with Achilles tendinopathy: a
randomized controlled study.**



2008 J Sci Med Sport Fallon, K., et al., A "polypill" for acute tendon pain in athletes with tendinopathy?



2008 Br J Sports Med Jonsson P, Alfredson et al. New regimen for eccentric calf-muscle training in patients with chronic insertional Achilles tendinopathy.



2009 Medicine & Science in Sports & Exercise. Gaida JE, Alfredson L, et al. Dyslipidemia in Achilles Tendinopathy Is Characteristic of Insulin Resistance.

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2010 Journal of Science and Medicine in Sport. Osborne H. Stop injecting corticosteroid into patients with tennis elbow, they are much more likely to get better by themselves!

- If a new anti-cancer drug were to show early (6 weeks) benefits with remission rates of 78% for the drug compared with 29% for placebo, there would be great excitement. If follow up data showed remission rates at 1 year of 87% in the placebo group compared with 69% in the new drug group with significant statistical and clinical significance the new drug would never make it to market.

2010 J Shoulder Elbow Surgery Tyler TF, Thomas GC, Nicholas SJ, McHugh MP.

Addition of isolated wrist extensor eccentric exercise to standard treatment for chronic lateral epicondylitis: a prospective randomized trial.



Figure 1A: Rubber bar held in involved (right) hand in maximum wrist extension.



Figure 1B: Other end of rubber bar grasped by noninvolved (left) hand.



Figure 1C: Rubber bar twisted by flexing the noninvolved wrist while holding the involved wrist in extension.



Figure 1D: Arms brought in front of body with elbows in extension while maintaining twist in rubber bar by holding with noninvolved wrist in full flexion and the involved wrist in full extension.



Figure 1E: Rubber bar slowly untwisted by allowing involved wrist to move into flexion i.e. eccentric contraction of the involved wrist extensors.

**2012 Sports Medicine, Arthroscopy,
Rehabilitation, Therapy & Technology.
Osborne H, Quinlan J, Allison G. Hip
abduction weakness in elite junior
footballers is common but easy to correct
quickly: a prospective sports team cohort
based study.**



Lateral Epicondylitis

- History
- Exam
- Investigations

Treatment

- Broom



Medical Epicondylitis

- History
- Examination
- Investigation
- Treatment

Biceps Insertion Tendinopathy

- History
- Examination
- Investigation
- Treatment

Gluteus Medius Tendinopathy





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Greater Trochanteric Pain Syndrome

- History
- Examination
- Investigation
- Treatment



Hamstring Origin Tendinopathy

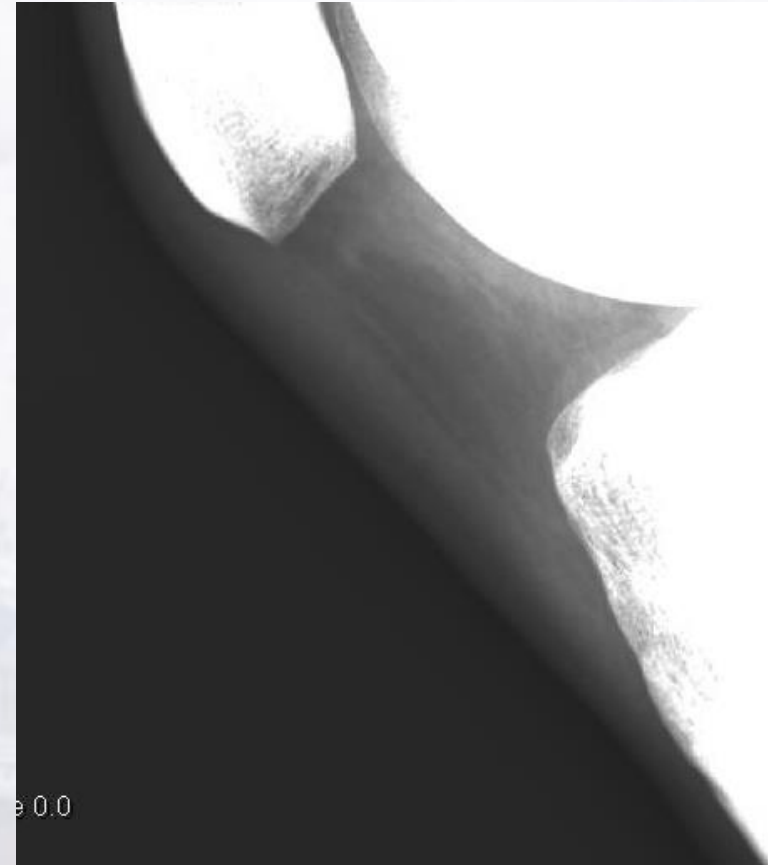
- History
- Examination
- Investigation
- Treatment

Patella Tendinopathy

- History
- Examination



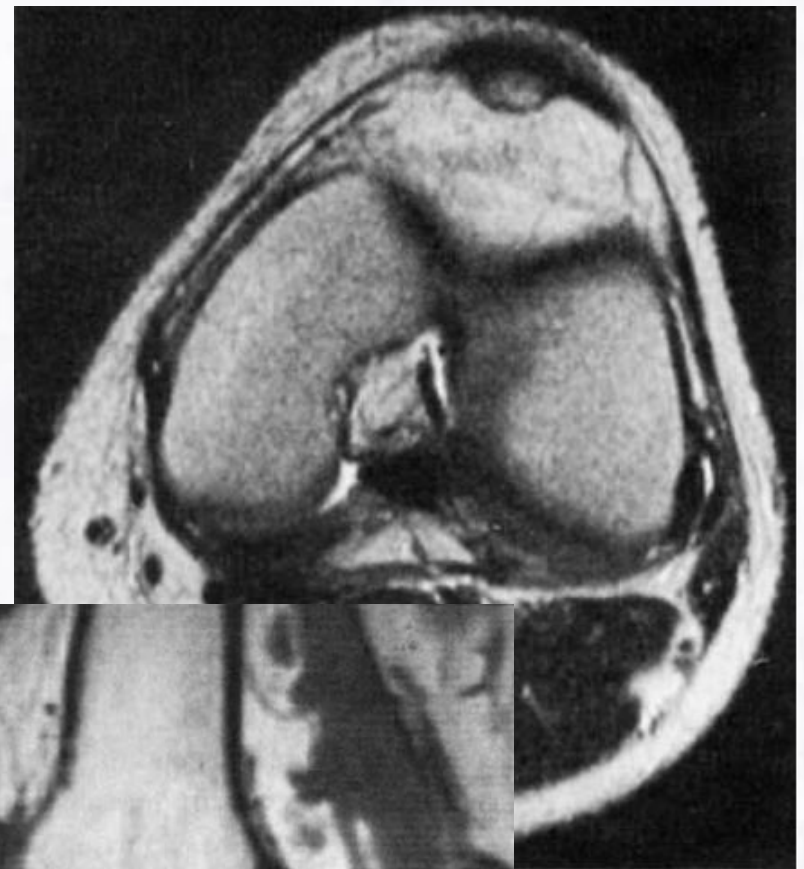
Investigations

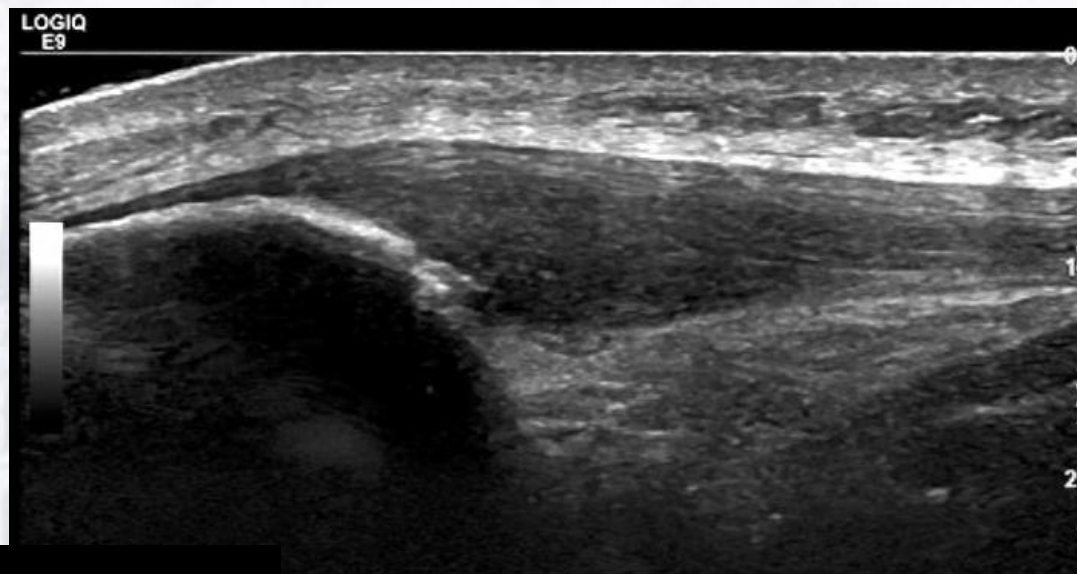


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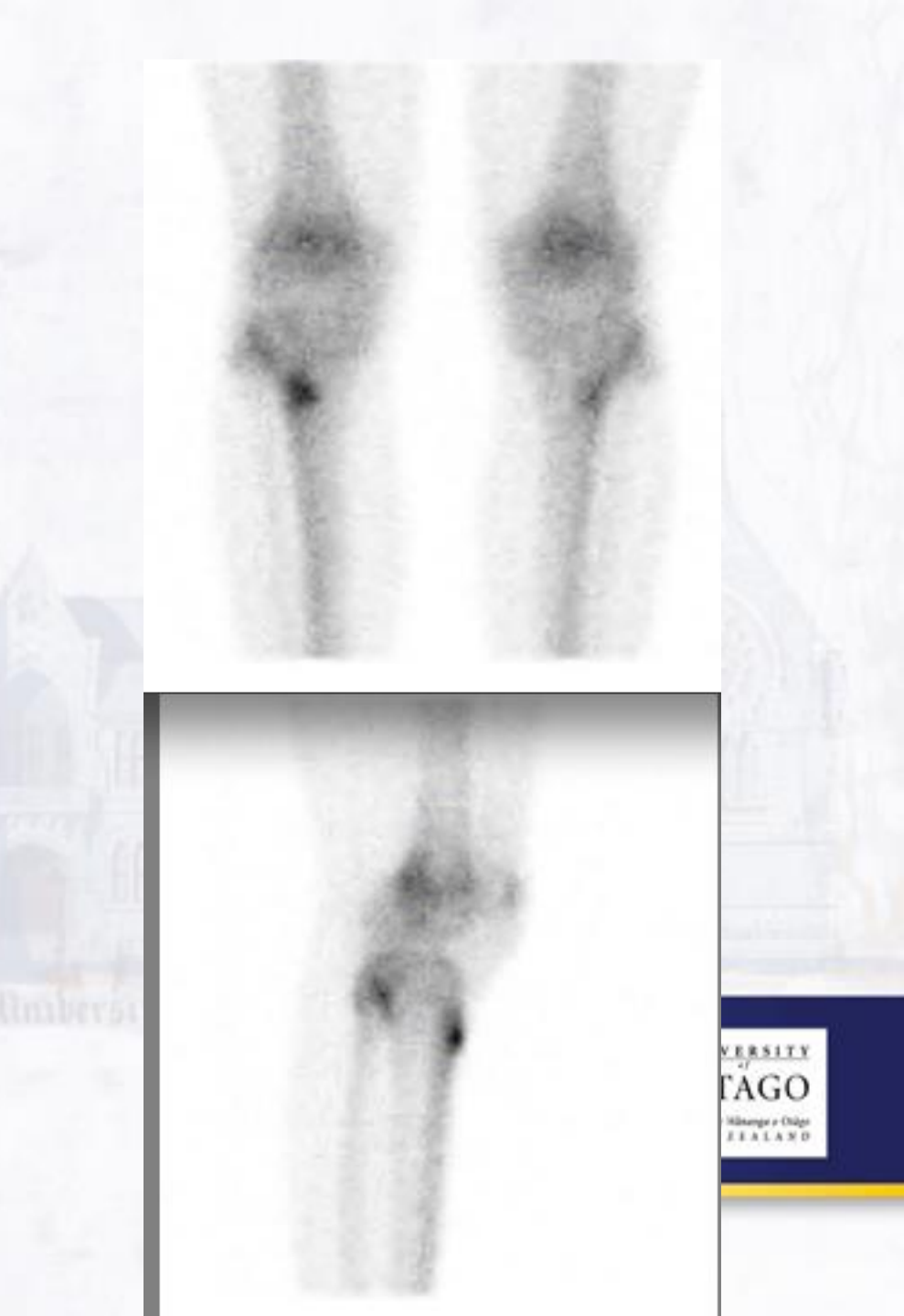
LEFT PATELLA TENDON



RIGHT PATELLA TENDON LS



R
Horizontal Ray



Osgood Schlatters Hangover effect



Treatment

- Treat the knee
 - PFJ
 - Decline Squats
 - Leg Extension
 - Leg Press
- Treat the whole person

Quads Tendinopathy

- History
- Examination
- Investigation
- Treatment

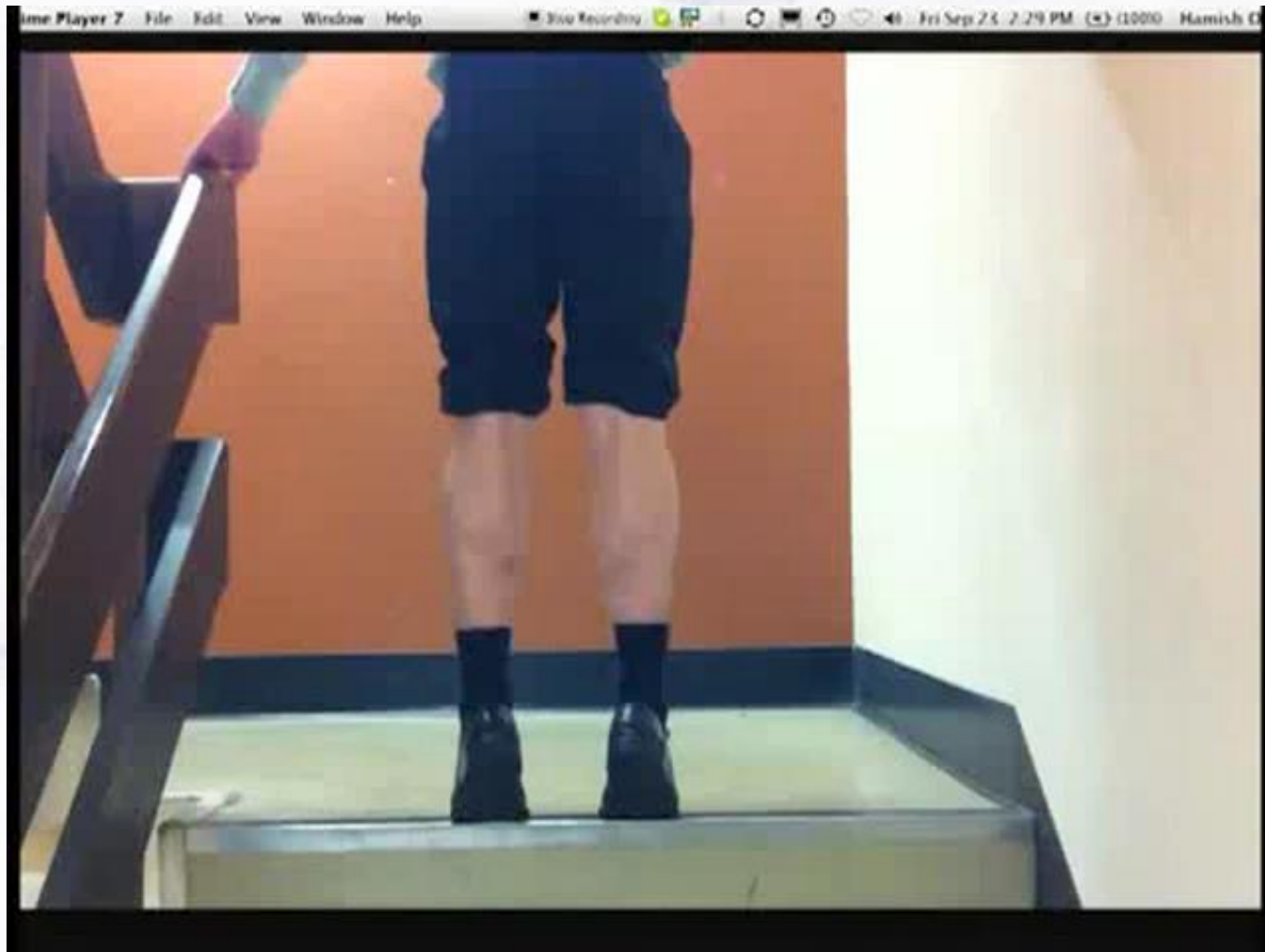


Achilles Tendinopathy

- History
- Examination



Treatment - eCAP



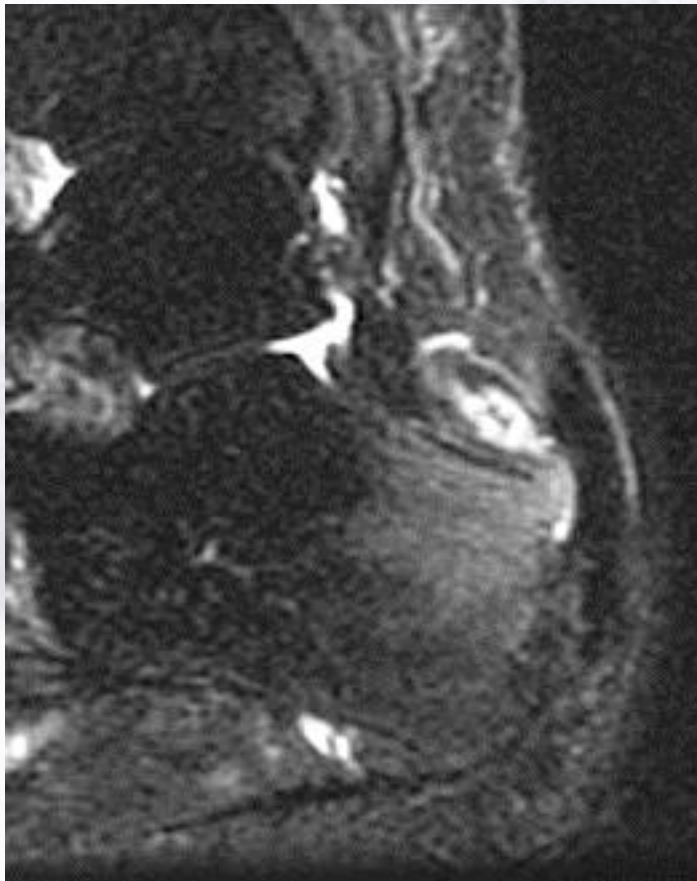
Achilles Enthesopathy

- History
- Examination

Investigations



Investigations



Treatment



Tibialis Posterior Tendinopathy

- History
- Examination
- Investigation
- Treatment

Peroneal Tendinopathy

- History
- Examination
- Investigation
- Treatment

FHL Tendinopathy

- History
- Examination
- Investigation
- Treatment



Problems with conservative management



Match your expectations

- Cross training
 - Starts immediately
- Expectations of the patient and the practitioner



Questions?

THANK YOU

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