



Tendinitis

G. Tam¹

- Evaluated the outcomes of low level laser therapy, corticosteroid injections or a wait-and-see policy on the periarthrititis of the shoulder
- Ga-As (904 nm), 60 W maximum power, peak power per pulse 27 W, pulse frequency 1280 Hz, average point region 2-8 J; dose/point = 3-4 J; total energy density 24 J/cm².
- At 6 weeks, corticosteroid injections were 90% (18) compared with 52% (11) for LLLT and 35% (7) for wait-and-see policy
- Long-term differences between injections and LLLT were significantly in favor of LLLT. Success rate at 52 weeks were 14 (70%) for injections, 19 (90.5%) for LLLT, and 16 (83%) for wait-and-see policy

Marcos et al²

- investigates if a safer treatment such as low-level laser therapy (LLLT) could reduce tendinitis inflammation
- As LLLT seems to act on inflammation through a selective inhibition of the COX-2 isoform in collagenase-induced tendinitis

¹ Effects of LLLT on the periarthrititis of the shoulder: A clinical study on different treatments with low level laser therapy, corticosteroid injections or a wait-and-see policy; G. Tam; Oral Health Prev Dent. 2007;5(1):63-71.

² Photochem Photobiol. 2011 Nov-Dec;87(6):1447-52. doi: 10.1111/j.1751-1097.2011.00999.x. Epub 2011 Oct 7.



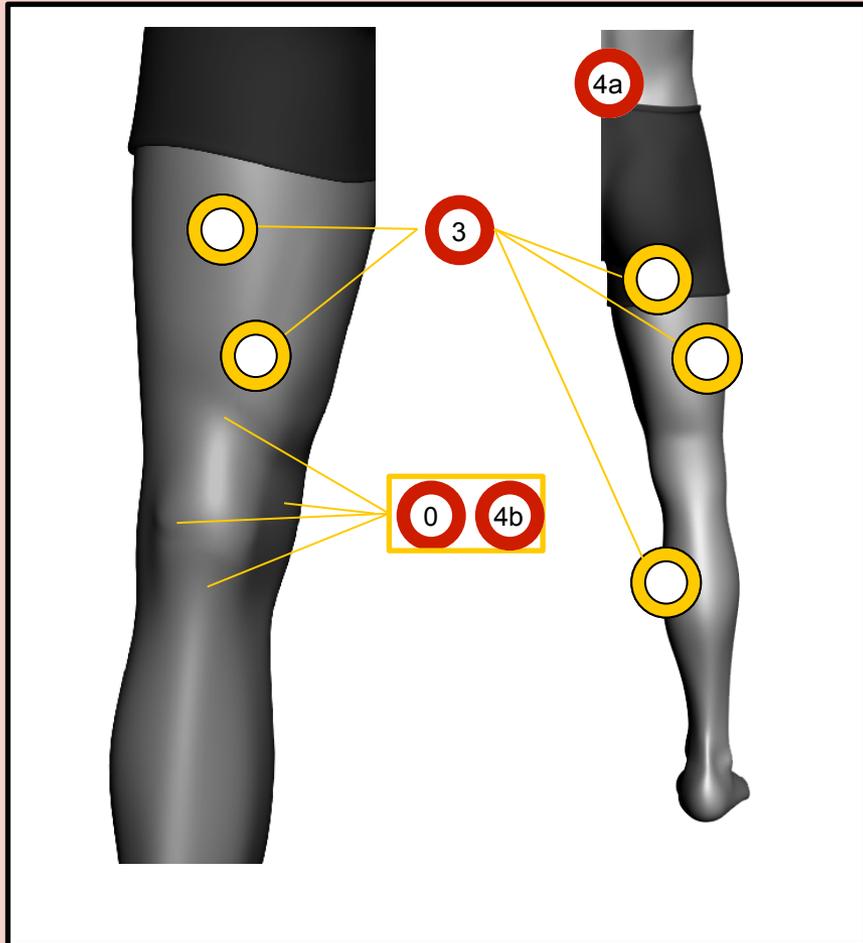
Laser Treatment for Tendinitis

Jan M. Bjordal, PT-MSc

Location	CW IR 620, 830, 1060	SPL 904
Lateral epicondylitis	2 J/cm ²	0.5 - 2 J/cm ²
	1 - 2	1 - 2
Rotator cuff	2.5 J/cm ²	0.8 - 6 J/cm ²
	2 - 4	2 - 4
Patellar	8 J/cm ²	0.8 - 6 J/cm ²

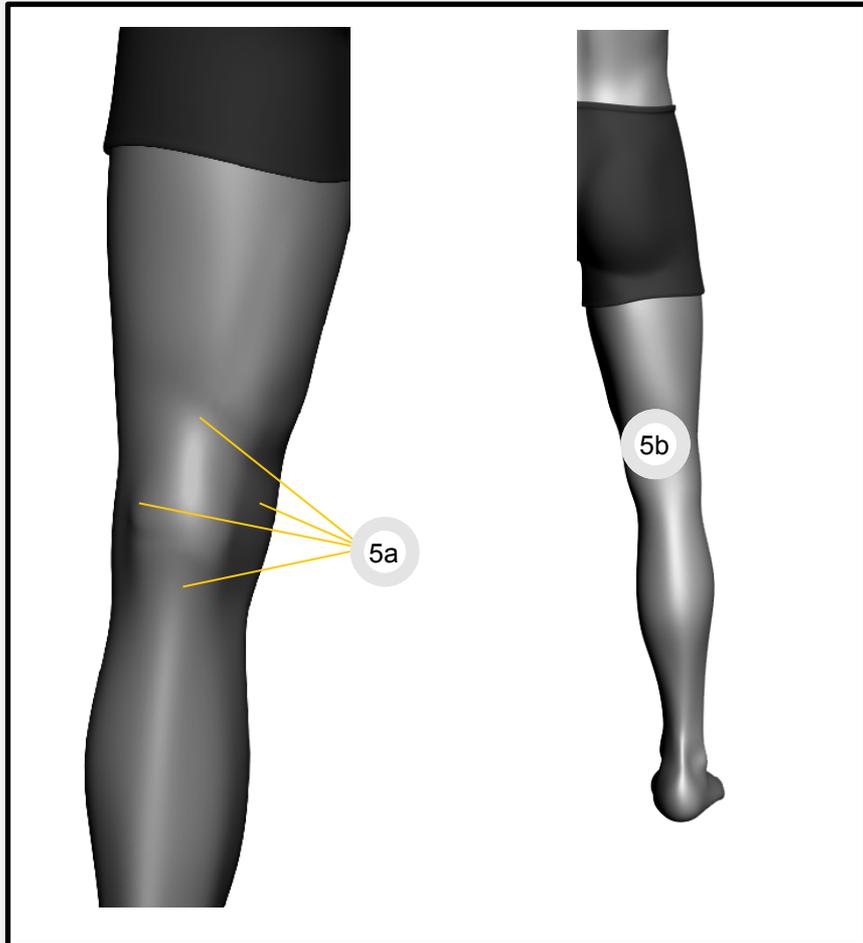


Priority Principle™: Patellar Tendinitis



	Priority	Principle	Tendinitis	Time	
Ultrasound, Massage, Taping / Bracing	0	Pain	(PRN)		
	3rd	Spasms	1000 Hz with Probes	Pontinen's Principle	
	4th	(a)	Pain (Systemic)	1000 Hz NRT	3-5 minutes
		and/or			
	(b)	Pain (Local)	1000, 3000 or 5000 Hz	1-2 minutes per point	

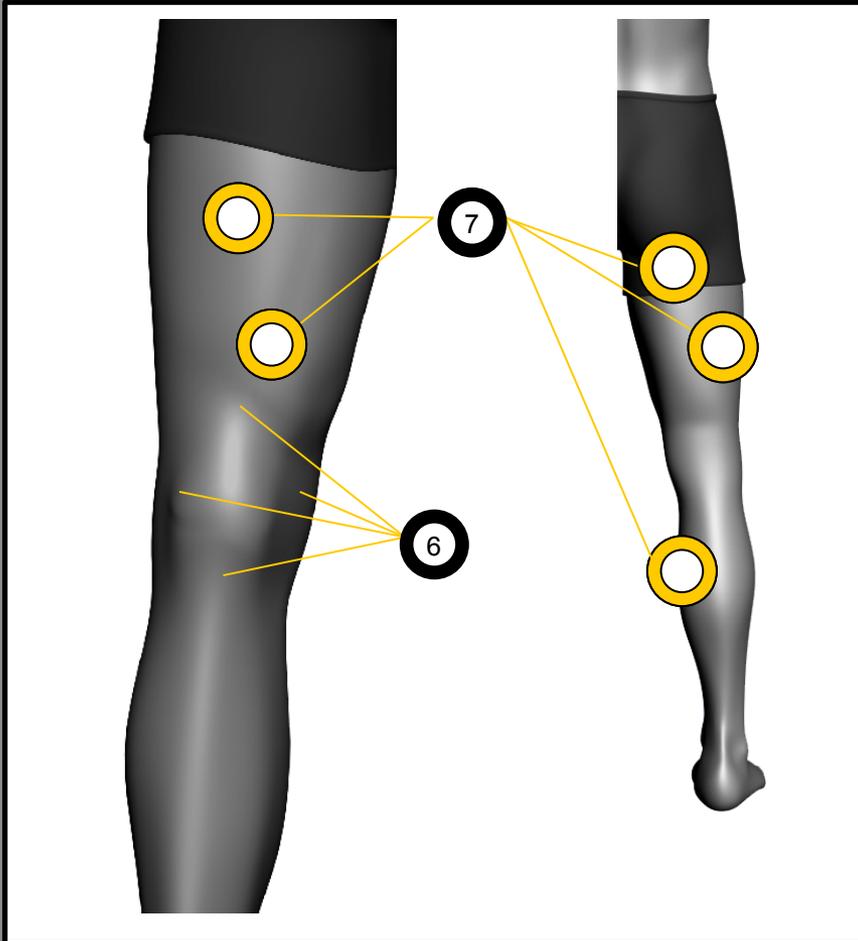
Priority Principle™: Patellar Tendinitis



	Priority	Principle	Tendinitis	Time
Ultrasound, Massage, Taping /Bracing	5th (a)	Tissue Repair (Primary)	5-250 Hz	DOSE all TARGET identified areas
	and			
	(b)	Tissue Repair (Secondary)	50 Hz PHT	5 minutes



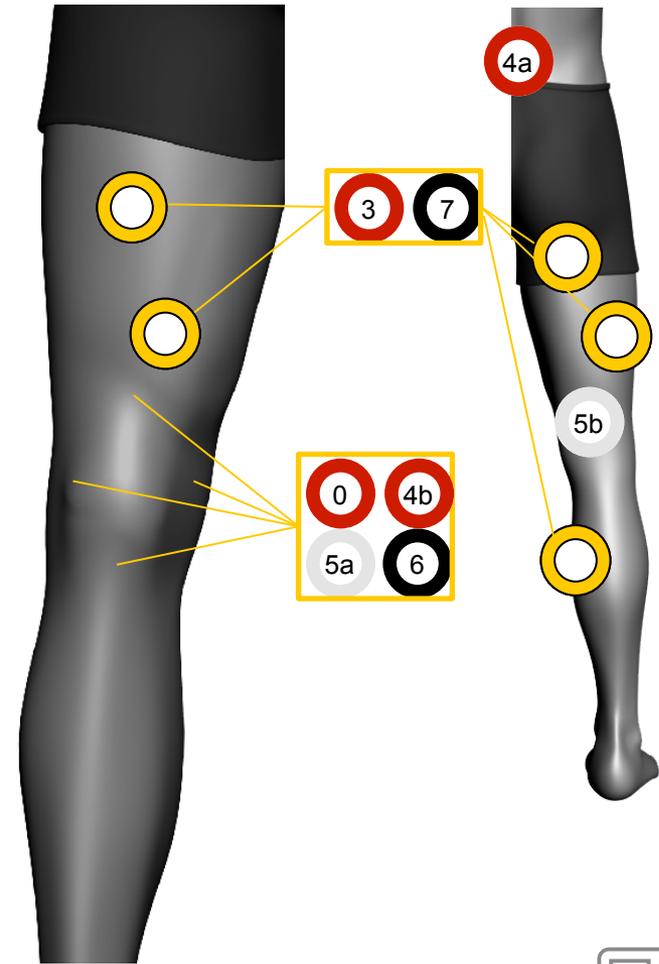
Priority Principle™: Patellar Tendinitis



Priority	Principle	Tendinitis	Time
6th	ROM	1000, 3000 or 5000 Hz	1-2 minutes per point
7th	Functional Strength	5-250 Hz	1-2 minutes per point

Priority Principle™: Patellar Tendinitis

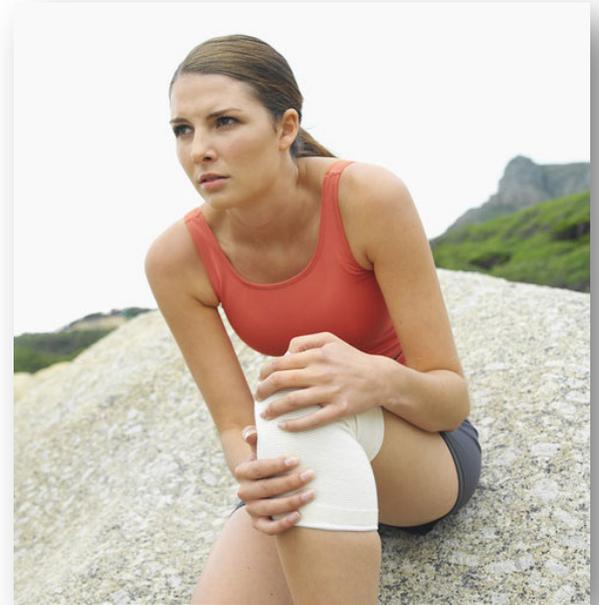
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Patellar Tendinitis

- Mobilizations of the affected patella, as well as “contract-relax” techniques to the quadriceps for stretching is recommended
- Movements beyond 90’ of flexion should be avoided as should open kinetic chain exercises
- Icing should be done as tolerated





Semi-Membranous Tendinitis

- Contract/Relax techniques for stretching
- Avoid open chain eccentric overload during recovery
- Treat all trigger points within the hamstring with laser or massage

