

Recommended anti-inflammatory dosage for photobiomodulation (PBM/ Low Level Laser Therapy)

Laser class 3B, 904 nm GaAs nanosecond pulse Lasers

(Peak output >1 Watt, mean output >5 mW or power density >5mW/cm²)

Effective dose range is 1-4 Joules/point depending on depth to target

Recommended irradiation times range between 30 and 600 seconds depending on output

Diagnoses	Minimum area	Minimum total dose	
Carpal-tunnel	2-3	2	Minimum 1 Joules per point
Lateral epicondylitis	1-2	1	Maximum 100mW/cm ²
Biceps humeri cap.long.	1-2	2	
Supraspinatus	2-3	2	Minimum 2 Joules per point
Infraspinatus	2-3	2	Minimum 2 Joules per point
Trochanter major	2-3	2	
Patellartendon	2-3	2	
Tract. Iliotibialis	2-3	1	Maximum 100mW/cm ²
Achilles tendon	2-3	2	Maximum 100mW/cm ²
Plantar fasciitis	2-3	4	Minimum 2 Joules per point
Arthritis	Points or cm ²	Joules 904nm	
Finger PIP or MCP	1-2	2	
Wrist	2-3	3	
Humeroradial joint	1-2	2	
Elbow	2-3	3	
Glenohumeral joint	3	3	Minimum 2 Joules per point
Acromioclavicular	1-2	2	
Temporomandibular	1-2	2	
Cervical spine	6	6	Minimum 2 Joules per point
Lumbar spine	4	4	Minimum 2 Joules per point
Hip	2-3	10	Minimum 2 Joules per point
Knee anteromedial	2-4	6	Minimum 2 Joules per point
Ankle	2-4	6	

Daily treatment for 2 weeks or treatment every other day for 3-4 weeks

Irradiation should cover most of the pathological tissue in the tendon/synovia.

Tendons

Start with energy dose in table, then reduce by 30% when inflammation is under control

(Does not apply for carpal tunnel tenosynovitis)

Therapeutic windows range from typically +/- 50% of given values

Recommended doses are based on ultrasonographic measurements

of depths from skin surface and typical volume of pathological tissue

and estimated optical penetration for the different laser types in caucasians

Disclaimer

The list may be subject to change at any time when more research trials

are being published. World Association for Photobiomodulation Therapy (WALT) is not responsible

for the application of laser therapy (photobiomodulation) in patients, which should be

performed at the therapist/doctor's sole discretion and responsibility

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