

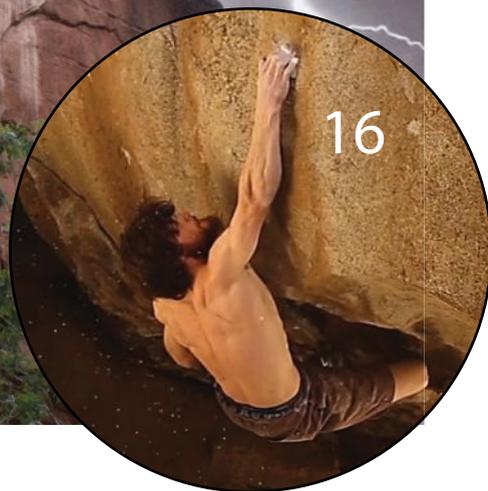
FREE Climbing Media for the Young and Unruly



3 Exclusive
Videos of Ashima
Shiraishi & Jimmy
Webb Inside
the eZine

INSIDE: ASHIMA SHIRAISHI • JIMMY WEBB • KILIII FISH PHOTOGRAPHY • GET
OUTSIDE WITH SOME NEW GEAR • TIME TO WORK ON YOUR FEET • CHECK
OUT THE EXCLUSIVE VIDEOS EMBEDDED IN THE EZINE

www.dpmclimbing.com



8 Ed Speaks
11 Clips
16 Pro-Files
34 Hot Shots



44 Booty Review
46 The Rack
48 Training
54 Last Pitch

Emerging Concepts in Injury Prevention:

CLIMBER'S ELBOW

By Dr. Jared Vagy



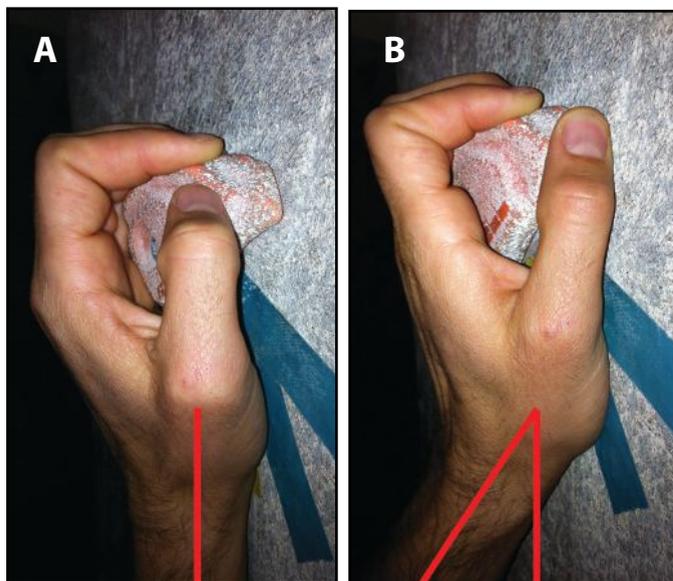
There's no better way to celebrate your impressive ascent of the pink-taped route at the gym than with an ice cold beer. But when you twist the cap off of that high-dollar Pabst, you feel a twinge in the back of your elbow, then again when you pick up the remote to tune into the latest episode

of American Ninja Warrior. You might notice that only specific movements cause pain. Sometimes twisting a doorknob is more painful than locking a crimp at your belly button. If you're experiencing something similar, you might have climber's elbow, more commonly referred to as

tennis elbow or scientifically known as lateral epicondylitis. It can become a debilitating condition, but if you treat it early with some targeted and simple physical therapy, you can slay it like you did the pink-route and live a long pain-free life on the rocks.

Cause:

The forearm is made up of two major muscle groups. The muscles on the palm side of the forearm are called the wrist flexors and the muscles on the back side are called the wrist extensors. When we climb, we are constantly overworking the wrist flexors by gripping. Over time, the wrist flexors get tight and overdeveloped while the wrist extensors become weak and underdeveloped; creating an imbalance. This imbalance can lead to an overuse injury of the weakened extensor muscles. The most common site of this injury is at the origin of the muscle on the outside of the elbow called the lateral epicondyle.



What to look for:

Grip strength is actually stronger when the wrist is extended back thirty five degrees. Climbers often overextend their wrists while grasping holds. This leads to overuse of their weakened wrist extensors and can become more of a problem when progressing to climbing harder routes. Image **A** demonstrates proper wrist alignment while image **B** shows improper alignment.

References:

Andrews JR, Holmes SW Jr. Athletic injuries of the elbow. In: Norris TR, ed. *Orthopaedic Knowledge Update: Shoulder and Elbow*. Rosemont, Ill: American Academy of Orthopaedic Surgeons; 1997:311–324.

Dimberg L. The prevalence and causation of tennis elbow (lateral humeral epicondylitis) in a population of workers in an engineering industry. *Ergonomics*. 1987;30:573–579.

Haahr JP, Andersen JH. Physical and psychosocial risk factors for lateral epicondylitis: a population based case-referent study. *Occup Environ Med*. 2003;60:322–329.

Nirschl RP, Ashman ES. Elbow tendinopathy: tennis elbow. *Clin Sports Med*. 2003;22:813–836.

Greenbaum B, Itamura J, Vangsnesh CT, Tibone J, Atkinson R. Extensor carpi radialis brevis: an anatomical analysis of its origin. *J Bone Joint Surg Br*. 1999;81:926–929.

The Best Research Based Prevention Exercise:

Perform 3 sets of 15

This exercise is performed with a Thera-Band FlexBar. It targets and strengthens the wrist extensors.

- A.** Hold the rubber bar in your painful hand with your wrist extended back maximally.
- B.** Grasp the other end of the rubber bar with the non-painful hand.
- C.** Twist the rubber bar by flexing the non-painful wrist while holding the painful wrist in back in extension.
- D.** Bring your arms in front of your body with your elbows straight while maintaining the twist in the bar (by having your non-painful wrist flexed fully and your painful wrist extended fully).
- E.** Slowly untwist the bar by allowing the painful wrist to flex.

Apply it while climbing:

Make sure to perform a sport specific warm-up before climbing. Minimize time spent grabbing and crimping holds with the wrist extended back.

Dr. Jared Vagy is a Physical Therapist and an authority on climbing related injuries. He received his Doctorate in Physical Therapy from the University of Southern California. He is board certified as an Orthopedic Clinical Specialist from the American Physical Therapy Association and is board certified as a Strength and Conditioning Specialist by the National Strength and Conditioning Association. He has ten years of climbing experience and has climbed all over the world. Climbing and injury prevention are his passions and he is committed to combining the two.

You can visit him at: www.DoctorVagy.com

Special thanks to Steve Grosserode for photography.

Smidt N, Assendelft W, Arola H, et al. Effectiveness of physiotherapy for lateral epicondylitis: a systematic review. *Ann Med*. 2003;35:51–62.

An KN, Hui FC, Morrey BF, Linscheid RL, Chao EY. Muscles across the elbow joint: a biomechanical analysis. *J Biomech*. 1981;14:659–669.

Alcid JG, Ahmad CS, Lee TQ. Elbow anatomy and structural biomechanics. *Clin Sports Med*. 2004; 23:503–517.

Pienimäki T, Tarvainen T, Siira P, Vanharanta JH. Progressive strengthening and stretching exercises for chronic lateral epicondylitis. *Physiotherapy*. 1996;82:522–530.

O'Driscoll SW, Horii E, Ness R, Cahalan TD, Richards RR, An KN. The relationship between wrist position, grasp size, and grip strength. *J Hand Surg Am*. 1992 Jan;17(1):169–77.