

Rock Climbing: Treating Common Wrist and Finger Injuries and Integrating Medical Philosophies, Part Two

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In the first part of this series, we examined the treatment of injuries associated with rock climbing from the perspective of Western healing. In part two, we will look at rock climbing and related injuries from the Eastern perspective.

Eastern Perspective

In traditional Chinese medicine, factors that contribute to sprains include *qi* and blood stagnation (eventually leading to liver/kidney yin deficiency), spleen *qi* deficiency (creating accumulation of dampness), and invasion of external pathogens (wind, cold and damp) into the channels/meridian/vessels.

To differentiate between acute and chronic injuries, we must determine external versus internal origins of the mechanism of injury. Acute injuries reflect external direct or indirect trauma, whereas chronic injuries represent internal pre-existing problems that allow the external pathogens to invade more easily, disrupting the circulation of *qi* and blood in that specific location.

Because the injury mechanism tends to be chronic, the focus of the following primary treatment is as follows. One can add in point combinations that support this primary treatment of the underlying condition(s). There are three components to examine: the local points (for the affected area); the distal points (for pre-existing/underlying conditions); and the back *shu* (transporting) points (for treating deficiency conditions and other factors). Reiterating the point, depending upon the individual climber, any specific injuries and underlying conditions, there are many point combination possibilities that can be used in addition to the local, distal and back *shu* points.

- SI 3 - stream point
- SI 6 - accumulation point, harmonizes collaterals, promotes circulation in SI
- HT 3 - sea point, harmonizes collaterals, promotes circulation in HT
- HT 5 - connecting point, harmonizes collaterals, promotes circulation in HT
- HT6 - accumulation point, harmonizes collaterals, promotes circulation in HT
- HT 7 - stream point, harmonizes collaterals, promotes circulation in HT
- LG 5 - sea point, harmonizes collaterals, promotes circulation in LG
- LG 6 - accumulation point, harmonizes collaterals, promotes circulation in LG
- LG 7 - connecting point, harmonizes collaterals, promotes circulation in LG
- LG 9 - stream point, harmonizes collaterals, promotes circulation in LG
- *Ah shi* and *ba xie* (extra) points

Additional Points

- Constant pain (+) LI 1 & SJ 1 - well points, remove obstructions in channels and open collaterals

- Painful arm (+) SJ 14 & LI 15 - promote circulation of blood and *qi*
- With heavy sensation (+) SP 9 sea point & ST 40 connecting point - promotes circulation of *qi* and eliminate damp
- Stabbing pain worse at night (+) SP 6 - promote circulation of blood

An example of a typical formula that can be used is as follows:

- *Xiao huo luo dan* (minor invigorate the collaterals special pills) - blood/*qi* stagnation;
- *Fang feng tang* (ledebouriella decoction) - wind cold invasion;
- *Gui pi tang* (tonifying the spleen pill) - spleen *qi* deficiency and blood deficiency

I also will apply Tiger Balm and white flower oil (or any other heating liniment) along the affected channels, then apply *tui na* to the affected muscled to stimulate movement of *qi*.

A few of the following points can be added in order to support this current treatment.

Qi/Blood Stagnation

The treatment principle is to maintain the flow of *qi* and blood circulation. By maintaining the flow of *qi*/blood, the physiological manifestation of injuries and pain are non-existent. However, if this *qi*/blood become stagnant, the flow within the channels/meridians/vessels around the affected joint becomes obstructed, creating pain in the affected area(s). The main physiological manifestation includes pain that is stabbing and fixed for blood stagnation, and wandering and distended for *qi* stagnation.

- *Ah shi* points - regulates circulation of *qi* and blood in channels
- SP 10 - disperses blood stagnation
- LI 4 - source point, dispels blood stagnation, promotes circulation of *qi* in the channels
- LV 3 - source point, dispels blood stagnation, promotes circulation of *qi* in the channels
- GB 34 - sea point, harmonizes movement of affected joints and strengthens tendons
- SP 6 - crossing point of the three yin channels of the foot
- UB 17 - gathering point of the blood

Sedating method should be used on all points. Use *xiao huo luo dan* or *jin gu die shang wan* (muscle and bone traumatic injury pill).

Liver/Kidney Deficiency

The treatment principle is to support the tendons by nourishing them through liver blood, and the kidneys nourish the bones. Over years of climbing, training long hours, environmental conditions and stress, the *qi* and blood get depleted or consumed; specifically, the *qi* and blood involving the *zang/fu* organs of the liver and kidneys. In either case, the lack of nourishment of both the tendons and bones gives rise to finger joint injuries. Age is a factor because, as we get older, the liver/kidney functions decline and the kidney *jing* and liver blood are unable to nourish the tendons and bones as efficiently as previously noticed in recovery after a climb.

- K 3 - source point, strengthens bones and tonifies kidney; tonify method
- LV 3 - source point, strengthens tendons and tonifies liver; even method
- GB 34 - gathering point for marrow; even method
- GB 39 - gathering point for tendons, reinforces tendons and bones; tonify method
- ST 36 - sea point of ST channel, promotes production of blood and tonifies SP/ST; tonify method
- SP 6 - crossing point of the three yin channels of the foot, tonifies blood and strengthens SP/LV and K; even method

Wind, Cold, Damp Invasion of the Joints

Wind, cold and damp pathogens can invade through the joints because that is where *qi* enters and exits. Wind presents with pain moving from joint to joint. Cold can create *qi* and blood stagnation because it constricts the flow of *qi* and blood within the channels/meridians/vessels and tendons, so the climber presents with severe finger pain. Dampness can create obstructions within the channels/meridians/vessels, due to the accumulation from spleen *qi* deficiency. The climber feels heaviness due to the damp accumulation, leading to stagnation, when the climber will feel fixed pain, swelling with a heavy sensation, and possible numbness in the phalanges and wrist joint.

Wind

Sedating method

- LI 4, SJ 5, UB 12 - relieves external wind and symptoms
- SP 6 - crossing point LV/SP/K channels, eliminates wind by regulating *qi*/blood
- SP10 - improves circulation of blood and is able to eliminate wind through increasing blood circulation
- *Ah shi*, GB 40, GB 41 - regulating local circulation of *qi*/blood

Cold

Sedating method

- L 14, SJ 5, UB 12 - relieves external wind and symptoms
- SP 6 - crossing point LV/SP/K channels, eliminates wind by regulating *qi*/blood; sedate
- ST 36 - sea point, dispels cold, warms channels, and tonifies *qi*; tonify
- UB 60, UB 63, GB 40 - local point, regulates *qi*/blood circulation; sedate
- *Ah shi* - local point, regulates *qi*/blood circulation

Damp

- SJ 6 - resolves damp, eliminates wind, eliminates cold
- SP 6 - crossing point of the three yin channels, eliminates damp, activates SP/ST
- SP 9 - sea point, eliminates damp, activates SP/ST
- ST 40 - connecting point, eliminates damp, activates SP/ST
- GB 40, UB 64 - source point, local point, regulates circulation of *qi*/blood, eliminates damp
- UB 63 - accumulation point, local point, regulates circulation of *qi*/blood, eliminates damp; sedating method

In summary, in order to treat injuries specific to rock climbing, the clinical management should not only include the symptoms of both mechanical and functional instabilities, but also address the integration of TCM, emphasizing the prevention and reducing the risk of chronic rock climbing injuries. To truly integrate both diagnostic methodologies, one must be well-versed in the philosophy behind TCM and understand and appreciate the biomechanical components, anatomy and kinesiology of the wrist, hand and finger joints. Implementing TCM perspectives into the treatment strategy for these climbers proves beneficial and ultimately essential in treating as truly preventing injuries from occurring.

Treating with TCM is extremely effective when applied in conjunction with TCM philosophy. Protocol treatments, which are unfortunately greatly represented both academically and clinically, seem to be more predominant as a typical symptom/sign-based treatment. That is not what Oriental medicine espouses. Acupuncture is like geometry - there are many different diagnostic methodologies that can be implemented in developing an acupuncture prescription - the key is

understanding and having the ability to modify treatments accordingly to the individual.

References

1. Robinson M. "Snap, crackle, pop," finger and forearm injuries. *Climbing* 1993;138:141.
2. Cole AT. Fingertip injuries in rock climbers. *Br J Sports Med* 1990;24(1):14.
3. Bollen SR, Gunson CK. Hand injuries in competition climbers. *Br J Sports Med* 1990;24(1):16-18.
4. Tropet Y, Menez D, Balmat P, et al. Closed traumatic rupture of the ring finger flexor tendon pulley. *J Hand Surg (Am)* 1990;15(5):745-747.
5. Bowers WH, Kuzma GR, Bynum DK. Closed traumatic rupture of finger flexor pulleys. *J Hand Surg (Am)* 1994;19(5):782-787.
6. Xinnong C (chief editor). *Chinese Acupuncture and Moxibustion*. Beijing: Foreign Languages Press, 1990.
7. Maciocoa G. *Foundations of Chinese Medicine*. New York: Churchill Livingstone, 1989.
8. Zhang E (editor in chief). *Basic Theory of Traditional Chinese Medicine*. Publishing House of Shanghai College of Traditional Chinese Medicine, 1990.
9. Bensky D, O'Connor J. *Acupuncture: A Comprehensive Text*. Chicago: Eastland Press, 1981.
10. Agostini. *Medical and Orthopedic Issues of Active Athletic Women*. Mosby, 1994.
11. American Academy of Orthopedic Surgeons. *Athletic Training and Sports Medicine*, 3rd ed. Chicago: American Academy of Orthopedic Surgeons, 2001.
12. Anderson, Hall. *Fundamentals of Sport Injury Management*. Williams & Wilkins, 1997.
13. Arnheim DD, Prentice WE. *Principles of Athletic Training*, 10th ed. McGraw-Hill, 2000.
14. Baechle. *Essentials of Strength Training and Conditioning*. NSCA: Human Kinetics, 1994.

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