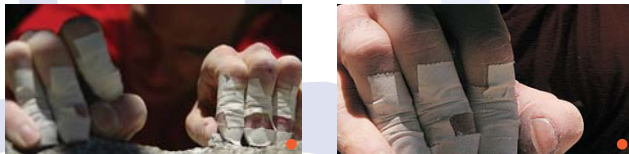


Wrist and Hand

Stretch the wrist and hand to limit flexion deformity (commonly seen as a 'claw' shaped hand and wrist). The important point about stretching the hand is **be specific** so that the tightened area actually lengthens. Stretch individual fingers and joints and feel the stretch in the area you want to lengthen.

If you experience pain over the pads of the fingers (commonly seen on the third and ring finger over the proximal phalanx) use 2.5cm wide tape to support the tendon pullies. Try using tape on the finger pads after injury to stop excessive forces being applied to the injury site to aid recovery.



Strengthen extensor muscles in the hand (the ones that straighten your fingers) as these are relatively weak compared to the highly developed flexor muscles. Use resistance with your other hand to strengthen the extensor muscles. Be especially careful with any manoeuvres requiring sudden loading of the tendons such as jumping onto holds or plyometric training.

Summary

- 'Listen' to your body and act before areas become a problem.
- Strengthen muscle groups that are relatively weak in climbers.
- Stretch specific tight structures.
- Prevent flexed postures developing especially at work.
- Don't increase training intensity too rapidly.
- Cross train and stress your body through different movements.
- Rotate training intensity aiming to peak for key events then reduce again.
- Have rest days.

...if you continue to experience problems call Hallamshire Physiotherapy clinic for advice.



Images marked ● courtesy of Heason Events



Call for advice
or to make an appointment on:

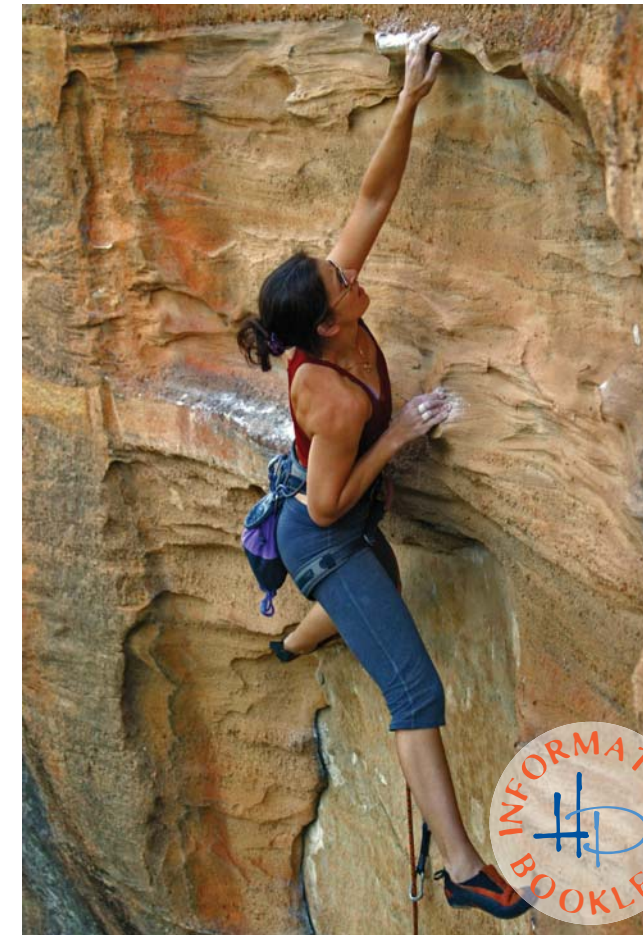
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Climbing Injuries and Prevention

Written by Dr Steve Hodgson PhD MCSP and Alison Macfarlane MSc MCSP

This is for information only and not intended to be a self-treatment programme.

▶ The body as a continuous kinetic chain

Before discussing upper limb problems it is important to consider the whole body and the link between the upper, lower limbs and the trunk (kinetic chain). This is the basis to training with 'body tension' positions as all the body is utilised when moving across the rock. It is not uncommon to see climbers with multiple problems (often on the same side) and stresses in one part of the body can result in pain somewhere else. For example, if you don't use your legs when climbing your upper limb will have to work harder (so use your legs!). If your shoulder is unstable then you might not experience shoulder pain, but elbow pain as it works harder to maintain the stresses through the upper limb. Therefore, if you have a specific weakness, concentrate on strengthening it and you will possibly find other areas will also improve.

▶ Factors influencing rate of injuries

▶ Tissue quality

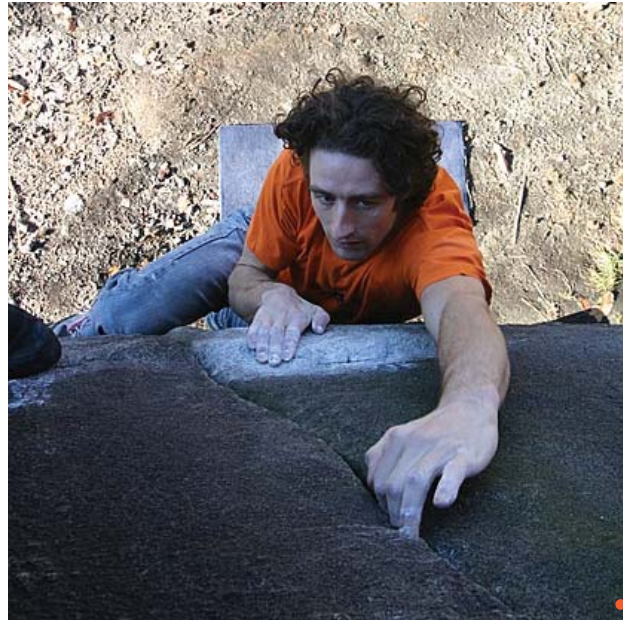
Some have excellent tissue strength and ability to regenerate. Others are less fortunate, so if you are in the latter group you will have to work harder to prevent injuries.

▶ Age

Despite a life of repeated trauma and a slowing of the bodies' ability to repair itself, recovery will take place and many climb well into their sixties and beyond.

▶ Overloading tissues

If you increase the stress on tissues too rapidly you will have problems. Before a long trip or holiday slowly increase your climbing (approximately 10% per week) and consider cross training to improve cardiovascular endurance and strengthen muscle groups you don't often use in climbing.



▶ Posture

If you work at a computer and climb several times each week it's not surprising you might develop a flexed posture. Poor posture can produce more stress on the shoulder as elevation of your arms requires the thoracic spine to extend (the reverse of the flexed or slumped position). If you can't extend your spine you have to stretch the shoulder even further and this can cause pain. Many climbers have too much flexibility in their shoulders and repeated stretching only compounds this problem. If you have a 'slumped' posture and especially if you work at a computer for long periods stretch your upper spine (thoracic) over a low backed chair repeatedly throughout the day.

▶ Hydrate

Keep drinking as muscles require fluid for optimum function.

▶ Rest days

Your body grows stronger on rest days and it allows microtrauma to repair. Don't be afraid to rest and consider cross training on other days to stress different muscle groups.

▶ Injury Prevention

▶ Shoulder

When you lie down, your shoulders should touch the bed. If they are moving forward gently stretch them back by placing one shoulder against the corner of a wall and sustain this position three times for one minute.

Strengthen the muscles on the back of the shoulder that rotate your arm outwards (external rotation) and push weights up over your head. The opposite action to that of climbing.

▶ Elbows

Lateral elbow pain (or 'Tennis elbow') is commonly caused by repeatedly over loading the tendon. This is sometimes incorrectly referred to as 'tendonitis' (inflammation of the tendon), and research suggest that it is not inflammation, but break down of connective tissue ('tendinosis') as a result of microtrauma to the tendon.



Strengthen the muscles on the top of the forearm (extensor muscles) as climbing over develops the flexor muscles of the forearm and this imbalance can contribute to problems. Some research suggests that eccentric strengthening (working the muscle as it lengthens) has beneficial results with the muscle that attaches to the problem tendon.

Remember there are other causes to 'tennis elbow' pain and the neck can cause referred pain into this area and shoulder problems can also increase stress into the elbow.