

Self-Diagnosis for Climbers

Part 1 – The Finger

We all self-diagnose; it's human nature. There is an awful lot of information available and many helpful opinions and it is often easy to match your pain with another's. But how do you know you're right? In short – you don't. The doctor or Physio might not even know, not in isolation as it is often a long process of elimination, tests, investigations and second opinions that determine the final diagnosis.

What is important is that when injured we engage with the process of healing and rehabilitation to ensure the best possible outcome. Having an idea about what we have done and how it affects us is definitely part of that. What follows is an attempt to remove the haphazard way we determine what injury we have acquired which is normally by searching on the internet for a term such as 'injured finger' and picking the best match. By being systematic and organised we can improve our knowledge of our anatomy, physiology, the healing process and exercise to maximise our recovery. There are lots of terms such as 'probably' and 'might be' as only a full clinical picture will give the right information and no real attempt has been made to suggest rehabilitation options except where rest is probably the best course.

(It is not intended to replace the expert knowledge of a Physiotherapist – if in doubt, find a good one).

So you have pain in your finger. What now?

Mechanism of injury

Did you do it when pulling on it? If so was there an audible 'pop' – this is probably an annular pulley (Google 'Climber's Finger').

If there was no pop (and not much pain) but you now have you a slight flexion deformity i.e. is it difficult to straighten a joint? Then you may have popped a volar plate (look it up – that is the last time I will say that).

Did you feel a sudden loss of strength and then developed a worsening pain when you gripped? This might be tendon problems. The loss of strength is your brain trying to avoid injury by inhibiting your pulling power but no doubt you had a route to finish so you probably caused yourself damage anyway. If you have done this then rest for at least six weeks.

Were you pulling hard on a complicated hold then felt instant pain which has gradually decreased? You have probably pulled an intrinsic muscle in your hand. Rest it for a week then see.

Are you a teenager? If you have hurt your finger then it could be a growth plate – have a word with your coach then see a Physio pronto. And rest.

Did none of those things happen? Read on.

Eliminate anything problematic

Have you any of the following symptoms:

- Headaches
- Dizziness
- Neck and shoulder pain
- Pins and needles
- Numbness?

Have you pain in both hands/fingers?

Do you have constant pain?

Have you any muscle wasting or strange movements in your hand?

If so then there might be something else going on such as neck problems, nerve root inflammation, cervical spine imbalance (such as whiplash) and cervical instability – this can cause dizziness and headaches and is more common in females but frequently overlooked in males. Consider your recent history to identify other possible causes such as a lead fall, tumble from a bike, illness that meant you took to your bed for a few days.

There are lots of things that just happen to us, many of which cause finger/hand pain such as: Carpal Tunnel Syndrome, Meningitis, Dupuytren's contracture, Cervical Spondylosis, De Quervain's syndrome, peripheral neuropathy and other, more serious issues (Cancer for example) to name but a few. If you have any doubts see a professional.

There is an apocryphal story where at a dinner party someone said to a Physio that their little finger keeps on extending upon which the Physio immediately supported their head and demanded an ambulance be called. It turned out they had a broken neck but hadn't developed problems just yet. Whether this is true or not it makes the point that it is important to consider all aspects, not just of the presenting condition but of the patient as a whole.

Pain

In order to determine what you have done you need to isolate the pain. Assuming you don't have constant pain (see above) then certain actions would cause the pain to worsen.

Is the pain worse when lifting something such as a kettle? If so then possibly a collateral ligament in your finger has been damaged.

Does gripping tightly cause sudden sharp pain in your finger? If so then possibly an annular pulley again.

Does the pain only come on when you have been climbing for a while? Does this pain spread across your hand?

Then it might be a tendinopathy.

Does the pain spread up to your elbow? Try holding both your arms out to the side with your palms down and repeatedly gripping. If this makes your pain worse then this could be a neuropathy. This is where the nerves become inflamed and irritated at a particular point and cause referred symptoms – this means not only do the nerves need treating but the cause needs finding and sorting out. Definitely worth a trip to the Physio.

Did the pain start in your thumb and is worse in the mornings? If so, then probably a bit of age related arthritis.

Does the pain come on when you grip a ball (or when changing gear in the car) but not when climbing? Consider a stress fracture of the metacarpals, also possibly a minor dislocation of the carpals. These can happen for no obvious reason and will repair themselves in good time with rest. And lastly, have you pain in the end joint of your finger? If so then this might be a tear of the main flexor tendon. This will be a long rehab.

Simple Tests

We can do some differentiation tests on ourselves to further identify the problem.

Try bending your fingers into a hook fist and forcing open each one in turn. First if you are unable to create the hook fist with one finger (Fig 1) then this might confirm damage to the main flexor tendon at the point of insertion. If the positioning is fine but you have pain on forced opening along the finger then very likely an annular pulley (again).

Next, try putting your thumb against the end of each finger in turn (making an 'O' – Fig 2) and force this open – you will need an extra pair of hands for this. Is one finger weak or all fingers weak? As a

Fig 1 possible FDP rupture of index finger



rough guide it should be very difficult to open the index and middle finger, a bit easier to open the ring finger and, obviously the little finger is easy.

If all fingers are weak then consider damage to the flexor muscles and/or tendons (there are two muscles: flexor digitorum profundus and superficialis). If just one finger is weak then it is our old friend the annular pulley.

You could try putting your palms together and push your elbows up and wrists down (the 'Bruce

Fig 2 Testing the finger tendons



Lee'). Does this cause you pain or symptoms such as pins and needles? If this is alongside index or middle finger pain then possibly Carpal Tunnel Syndrome. If shooting pain along the arm from the finger then more likely to be tendinopathy or Golfer's Elbow.

Secondary problems

Any 'insult' to a joint will cause problems up the kinetic chain as we develop movement dysfunction to compensate for pain and weakness. Be aware that a finger problem often causes shoulder and elbow problems along the line. Consider tissue healing times when working out

where the problem started. If you develop a shoulder problem within twelve months of spraining a ligament then this is likely to be connected. Similarly if Tennis or Golfer's Elbow is acquired within a few months of a finger problem then this too would suggest finger weakness as the cause.

All upper limb problems can cause neck pain due to the muscles of your shoulder and arm hanging from the neck.

Part of any finger rehabilitation programme should include arm, shoulder and neck exercises to avert any problems developing so make sure your Physio has a good look round.

Remember

Being fully functioning and operating on all cylinders is more than just a preference for us as our clients and indeed, our safety depends on it not to mention our livelihoods. Everything heals eventually but making sure it heals in the right way is important to maximise your performance as a climber and it improves your knowledge as a coach.

Next month – the elbow.

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