

### Squad Screening Part 3 – Special Tests

This is the last in this series looking at tools to help you screen your squad and it focusses on 'special tests' which are specific actions performed by the climber being tested or a trained practitioner to determine a specific outcome. There are no half measures here or need for analysis if done correctly and the results can be recorded as;

- Pain – see a physio.
- Weak – specific training required.
- Normal.

In my screening clinics this is the most popular part of the course as it is interesting learning some specific skills but a word of caution. Deliberately causing pain is not a good idea especially to one of your squad kids; proper training is essential so to get round this problem I am only listing either very easy ones to perform or ones that the climber can do to themselves.

Before commencing any testing routine we need to establish the reason why we are doing it. If they are injured they should be going to see a Physiotherapist. If they have unexplained pain, a Doctor. As coaches we are looking for weakness and tightness. As a competition climber there will be very minor differences between the top rankings and every little modification to someone's training can be crucial. If you do not correctly establish these reasons then you are not fulfilling your primary role as a coach. Also, we need to keep our climbers safe – having a hypermobile 12-year-old girl swinging wildly through roofs might jeopardise not only their career but their health. We may also suspect that someone has an underlying weakness or imbalance that is affecting their climbing which is manifested in a variety of ways such as:

- Similar physique to another but vastly different ability in some areas.
- Sport induced deformity i.e. scapula winging, aping of the shoulders, very arched lower back.
- Gnarled hands (in a child – unusual).
- Sport induced imbalance – in climbers; little legs.
- Flared legs when dead hanging.

Your experience as a coach will really help here and spend some time reading around specific, climbing related problems. Dave MacLeod's book, 'Make or Break' is a good place to start or any good physiology book will give you more in-depth information. As well as this there are lots of online resources. If you don't know what you're looking for then you can't possibly know what you have found.

**Fig 1: Testing the rotator cuff**



#### Test one – Rotator cuff weakness and/or damage

You would try this test if the climber is complaining of an occasional niggle in their shoulder – or more often as not with kids you just may see them flex their shoulders after dead hanging but not complain of pain.

Have the climber sitting and they should hold an arm ahead of them and out to the side a bit with a slightly bent elbow as though holding a can of pop aloft (Fig 1). Fix their shoulder with one hand to stop them tipping towards you and *gently* press down on their forearm.

Pain is positive for a rotator cuff problem. This is known as the Full Can Test.

If there is no pain have the climber turn their arm inwards as though 'emptying the can' then press down again (Fig 2). This is the Empty Can Test. Pain on both is definitely a problem requiring a physio, pain or weakness (compared to the other side) means you should consider keeping them off the steep stuff for a bit and do some free weights to rebalance their shoulders.

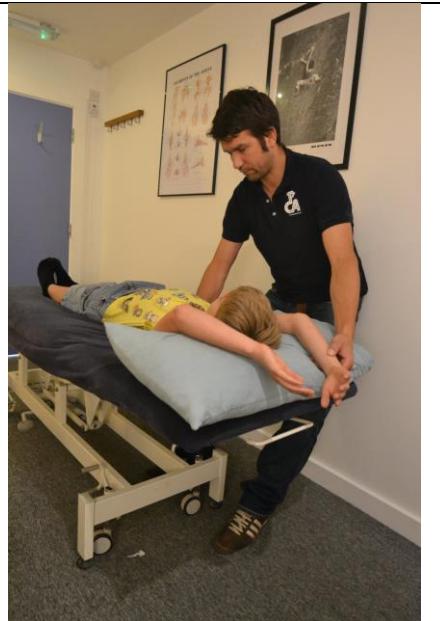
### Test 2 – Lats tightness

You might choose to do this test for someone who lurches from side to side as they cut loose and pull upwards or it is even worth doing speculatively as part of pre-season testing. It's easy to do and requires no handling. With kids it's easier to do this on the floor

**Fig 2: Empty can test**



**Fig 3: Testing Lats**



rather than the conventional against a wall method (which I have featured previously).

With the climber lying on their back and their hands relaxed onto their tummy, slide your hand, palm down under the small of their back. There should be a slight gap (varies depending on the size of the climber). Then ask them to put their hands above their head to rest on the floor 'above' them. Someone with tight lats may not be able to put their arms down easily and you might consider pressing gently down (Fig 3). If their lats are nice and loose then the gap in the small of their back should remain the same. Tight lats lift the pelvis and cause the gap to increase, sometimes considerably.

Tight lats will take a long time to resolve but encourage lots of stretching – remember, hanging from your lats does not stretch them.

### Test 3 – Hip Movement

The climber's position relative to the wall is crucial and we can all identify a climber whose bum sticks out. It might be a congenital issue with no real solution or it might be because your climber engages in another sport at school (they almost certainly will do) such as rugby and football – and these are the two main culprits. Powerful, tight leg muscles are encouraged with these sports but are not much use to climbers.

With the climber on their back get them to cross an ankle across the other leg as in Fig 4. You will see that the knee sinks easily to the same level as the other knee. In Fig 5 you will see a significantly higher

knee – this test was not staged, Harrison, in Fig 5 used to be a professional footballer and is still suffering.

Resolve this with a sustained programme of adductor stretching.

**Fig 4: Fabere's test for adductor tightness – nice flat knee in a perfect specimen**



**Fig 5: Harrison's knee is much higher due to very tight adductor (groin) muscles**



#### **Test 4 – Quad and hamstring tightness**

Both easy to test – hamstrings by sliding the hands down the shins towards the toes and quads as in Fig 6. Hamstring strains are one of the commonest injuries in football but tends to be managed badly. If they're tight – stretch them *after training*.

#### **Test 5 – Core stability (or body tension)**

A nice easy test but remember to watch carefully – the movement can be hard to spot. Have the patient lie supine and then, with knees bent at 90 degrees and feet on the floor push into the bridge position. Then (watch now) ask them to lift one leg off the ground (Fig 7). A positive test is any dipping of the hip – either side but normally they dip towards the lifted leg.

Resolve this problem with lots of bridging work, planking and technical traversing.

**Fig 6: Testing quad length**



Hopefully this has given you some ideas of how to test for specific things and how these can not only be a useful set of tools but an adjunct to your coaching. They can all be regularly incorporated and by doing so you engender a sense of responsibility in your climber and allow them to take ownership of their physical well-being. This means easier and more successful sessions, warming up and down becomes part of the climber's practice and is focussed on their needs which will improve their exercise compliance as they understand why they are doing it. Also, it helps eliminate dangerous coaching practices (hold tighter/pull harder) and who knows, it might even create better climbers.

**Fig 7: Testing for hip stability**



The full screen can now be downloaded from my website.

Please send feedback and email and any suggestions and changes.

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