

The Real Value Of Pre Training Markers

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The Value Of Pre Training Markers In Preventing Injuries



Pre training markers are part and parcel of the professional sport setting in this day and age. This article will outline some common pitfalls with using pre training markers and clear some misconceptions of what pre training markers really are. This article, as is the goal of The ProSport Academy is to provide practical advice and training underpinned and combined by interpretation of the current literature. The ART Of Working Successfully In The Sporting Environment...

Why Bother With Pre Training Markers?

Pre-training markers are a very useful tool if used sensibly and as part of a common sense approach. Personally, I use pre-training markers to gain an insight into my athletes nervous system. The brain craves homeostasis on a cellular level and therefore having a 'normal' range of motion battery of tests for that INDIVIDUAL player before the rigours of a pre-season training load/stress/program is placed upon their nervous system or a training session is a useful adjunct provided it is used as part of a bigger picture and the information is also used wisely.

The athletes 'normal' will always be changing as the nervous system adapts and this is important to be aware of. Picking your battery of tests will depend on the movement demands placed on the athlete in their sporting environment that will STRESS their nervous system most. Injury will usually occur when the athlete is unable to adapt to the stress placed upon it, therefore tests that requires the athletes soft tissues to lengthen and shorten about an axis of rotation that is similar to demands of the sport is a good place to start. An inability of the tissues to lengthen and shorten prior to training may highlight some problems for the athletes nervous system that may sensitise the tissues if continued to be stressed without having adapted from the previous days training/load/stress.



ANKLE MOBILITY T

Physical Training Markers Misconceptions

1. A Decrease In Range Of Motion In A Test Means An Injury Is Coming

Athletes STRESS their bodies daily when training and playing their sports. The nervous systems role is to assess the threat and respond. Sometimes the nervous system will 'tighten' things up or 'restrict' range of motion until it learns to adapt to the stress. A realistic pre-season will see athletes struggle to keep baselines daily and will decrease range of motion initially. This is ok and this information should be used to help design the pre training movement preparation session.

↓ 10	11	↓ 11	12	50°	30°	60°	50°	↓ 220	235	↓
11	11	↓ 10	12	60°	60°	60°	60°	270	270	↓
9	9	10	8	70°	30°	70°	50°	300	295	↓
↓ 10	11	↓ 9	11	↓ 20°	30°	↓ 20°	30°	170	170	↓

2. Physical Markers Alone Is Enough

Physical markers can help get an idea of what is happening in the nervous system via its output which is essentially this battery of tests been used. Just because the score may be decreased does not mean it is 'scar tissue' or 'adhesions' built up overnight that is the cause. An emotional stress or chemical/hydration issue can very easily result in a protective response of the body. Apprehension about the days training is another protective response. Physical markers may not necessarily mean a physical manual therapy intervention is always needed. The 'art of injury prevention' is knowing your players and TALKING to them. Sitting behind a computer looking at physical markers will not let you know the player has family troubles at home or certainly give you clues he is not his usual self. It is very easy to lie in a wellness test inputted in a piece of paper or via a phone but it is hard to look someone in the eye and lie.

Wellness					
⬆ Sleep	⬆ Energy	⬆ Mood	⬆ Appetite	⬆ Soreness	⬆ Sickness
●	●	●	●	●	●
●	●	●	●	●	●
-	-	-	-	-	-
●	●	●	●	●	●

3. Players Correcting Physical Training Markers Will Prevent Injuries

This is a common misconception. Athletes doing pre training markers and been expected to react to the information alone will not prevent injuries. In reality the vast majority of athletes DON'T CARE if their ankle range of motion is down or their sit and reach is off a little. Relying on athletes to take ownership of improving their pre training markers is a dangerous game and will yield limited results from experience. Athletes get distracted quickly via players, coaches, phones and therefore will more than likely not provide enough attention to the job at hand. We have all been there getting the fancy corrective exercises laminated and put up on the wall. The information gained from the pre training markers needs to be used to help design the warm up, prehabilitation or pre training movement prep that day and cannot be assumed that the athlete will take ownership.

The Bigger Picture

1. What Else Are You Using?

Using subjective wellness markers in addition to the physical markers will help cross reference potential causes of threat to the nervous system. A low mood, low energy combined with decrease in physical markers may be of greater concern than an athlete with high mood, high energy but physical markers are down slightly. The motivational levels are different and may need to be treated differently when communicating with the athlete and making decisions based on the information present.

2. Have A Dedicated Member Of Staff Or System To React To The Information

The physical training markers and subjective markers needs to be ACTED UPON EVERY SINGLE DAY PRIOR TO TRAINING. This form of monitoring is reactive in the present day but proactive in the bigger picture. Realistically if you are going to the effort of monitoring athletes wellness and movement capabilities, then there needs to be the ability to bring about positive change in the form of a pre training movement session or an opportunity for a dedicated member of staff to communicate with, direct the athlete to appropriate solutions or at worst case perform manual therapy to help de-threat the nervous system.

3. Use The Information As Part Of The Bigger Picture

In reality, this will depend on the value the head coach places on this information. Every coach is different and some will be open minded and listen. Others will not care what the impact of the markers are. If possible using the information to help influence the design

of the warm up or length of warm up can help ease the athlete into the days training sessions, allowing the nervous system to be exposed to the load gradually as opposed to starting at 100 miles an hour.

Practical Applications

- Think Nervous System Response To Perceived Threat Rather Than Just Physical Muscles Tightening
- Combine The Physical Markers With The Subjective Wellness, The Hydration Testing Or Other Forms Of Monitoring And Cross Reference
- If You Are Monitoring, Have The Power To React To The Information Daily BEFORE Training Starts
- Know Your Players And Make Eye Contact With Your Players If There Is A Perceived Threat To Their Nervous System
- Use The Information To Help Design Pre Training Movement Preparation, Warm Ups And Sessions, Never Assume
- Learn From Your Mistakes Of What Works And What Does Not Work And Do Not Make The Same Mistakes Twice

BIO



Dave is the Head of Sports Medicine at Huddersfield Giants Rugby League Club and is Director Of Education at The ProSport Academy. Every year Dave mentors 25 therapists for 12 months in this intensive CPD pathway to prepare them for the demands of working in Professional Sports, The ProSport Academy Therapist Mentorship Program, For more information visit here: <http://theproportacademy.com/the-prosport-academy-mentorship/>