HOT TOPIC

ARE YOU hyper-mobile?

JOINT LAXITY MIGHT SOUND HARMLESS BUT IT CAN ACTUALLY IMPACT ON HEALTH AND WELLBEING.

'HYPERMOBILITY' REFERS TO excessive flexibility in one's joints and/or ligaments. Generally, there exists a greater prevalence of hypermobility syndrome in females, Asian populations, Africans and least often in Europeans.

Joint laxity is typically greatest at birth, which decreases during childhood and continues to decrease during adolescence and adult life. Ligament laxity is determined by the individual's genetic makeup and hormones, and the genes that encode collagen, elastin and fibrillin (which are all important in influencing joint flexibility). Other factors that impact range of motion include shape of joint surfaces, muscle length and mobility of neural structure.

For many, hypermobility does not cause a problem and is often even considered an asset. For others, however, hypermobility brings with it musculoskeletal symptoms, which may have been mismanaged in the past. The challenge can be that few people recognise hypermobility as a pain syndrome because there is no range to improve on and it can be easy to worsen symptoms with incorrectly prescribed stretching and exercise.

Note: Stretching a tight muscle can actually destabilise a joint, meaning muscles may be tightening up in order to protect an already unstable joint. So take caution with stretching if you are deemed hypermobile.

IF YOU SCORE:

0-2 = hypomobile
2-3 = normal
3-5 = moderately hypermobile
5-9 = hypermobile to extreme hypermobility

HOW IS HYPERMOBILITY IDENTIFIED?

A hypermobile individual will often:

+ Fidget with hands.
+ Have skin that is thinner, stretchier or subject to striae which are not due to large weight changes.
+ Have a sway back or kyphosis-lordosis.
+ Hyperextend knees*.
+ Hyperextend hips (sway back – weak hip flexors, weak glutes)*.
+ Have a soggy end-range in passive range of motion testing.
+ Have some immobile joints (e.g., thoracic and cervicothoracic junction tend to stiffen). These areas have the potential to increase stress on mid cervical and lumbar spine.
+ Have increased healing time.

**attempt to gain more stability at the end-range*

A more formal, common test used to identify the possibility of hypermobility (although with some limitations in that not all joints are included in the test) is the 9 Point Beighton Hypermobility score. This requires assessment of whether you can:`

+ Passively dorsiflex the fifth metacarpal joint greater or equal to 90 degrees (2 points)
+ Passively flex thumb to wrist (2 points)
+ Passively hyperextend elbow greater or equal to 10 degrees (2 points)
+ Passively hyperextend knee greater or equal to 10 degrees (2 points)
+ Actively place both hands on floor, legs straight (1 point).

Additional questions to identify hypermobility syndrome include:

+ Did you have growing pain as a child?
+ Did you participate in gymnastics or ballet in your youth?
+ For females, did you feel better or worse during pregnancy? It is common to report a considerable change in wellbeing during pregnancy (seems that pregnancy was the start of their problems), as with more relaxin being produced, the joints become more mobile.
+ Have you had any dislocations, subluxations or fractures?
+ How have you responded to analgesia (usually little effect)?
+ Do you dislike sustained postures such as sitting and standing?
+ Do you dislike too much activity?
+ Do you bruise easily?
+ Do you have stretchy skin?
+ Do you have any hernia, varicose veins or prolapses (connective tissue is involved systemically)?
+ Do you have any neuropathies?
+ Do you have Raynaud's phenomenon?

WHAT CAUSES THE PAIN?

Bergmark (1989) proposed there are two muscle systems involved in the maintenance of spinal stability:

Individuals with hypermobility syndrome have altered proprioception, kinaesthesia, or sense of their body position in space. Therefore, not only is there less support for any given movement offered by the muscles, ligaments, fascia and tendons, there is also a reduced ability to sense what is good posture and correct positioning or exercise technique. Likely mechanisms involved in the development of pain symptoms include:

+ Lack of muscular control in the hypermobile joint range, which can transfer loads ineffectively, causing subsequent microtrauma to tissues.
+ Decreased muscle tone and tensile strength, which decreases the overall efficiency in the active support system.
+ Less restraint and control offered by inherently weaker ligaments, capsules and fascia, leading to a deficiency in the passive support system.
+ Deficient proprioception may lead to problems in the neural feedback and feed-forward system, leading to abnormal motor control.

It is probable that individuals with average flexibility have better protection from injury by their normal tissues (except those who require greater range of motion for their specific sport (e.g., kickboxing), and those who have developed a hypermobile

range can enhance joint stability through good muscle strength and control.

WHAT SORT OF TREATMENT CAN BE UNDERTAKEN?

Good muscle tone, particularly the deep postural muscles, will help protect against injury and improve joint stability. In addition, management of hypermobilty syndrome includes various modalities, such as:

+ General advice
+ Reassurance
+ Passive mobilisations
+ Exercise to improve posture
+ Muscle balance and endurance
+ Joint stabilisation
+ Proprioception and joint awareness
+ Rehabilitation
+ Lifestyle modifications
+ Chronic pain management.

TRAINING FOR HYPERMOBILE INDIVIDUALS

Remember to consult your personal trainer for assistance with these training tips.

Then as soon as a good sense of body position and stability have been achieved, progressively integrate prone, crawling and finally to standing postures.

Successful management of your hypermobility syndrome will occur only when you have a true awareness and an internal sense of control. By acknowledging any limitations and/or treatment of your hypermobility you can then change your actions, feel responsible for your health and, ultimately, change your life for the better.

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