

Benign Joint Hyper-mobility Syndrome

Benign Joint Hyper-mobility Syndrome BJHMS is commonly termed Double Jointedness, Loose Ligaments or Hyper-mobility.

BJHMS refers to the elasticity of collagen. Collagen is the protein, which forms part of several structures in the body like ligaments and blood vessels. People are born with BJHMS. It is more common in females - perhaps to aid giving birth.

Ligaments are structures, which join bones together at joints of the skeleton. They exist to stabilise joints whilst muscles work around them. One of their functions is to prevent the joint from being moved beyond its normal range of motion - hyperextension. BJHMS sufferers often have joints, which move beyond their normal range of motion when placed under stress causing jamming to their joint edges and inflammation.

Another function of ligaments is to respond to the joints position in space, for example, whilst walking. The ligaments are able to contract or loosen depending on the demands of the joint and the environment - proprioception. BJHMS sufferers lose the ability to be aware of their joints in space; they become clumsy and injure themselves.

Collagen also exists in blood vessels. Arteries and veins are tubes. The wall of the tube contains collagen, which is thicker in arteries and helps to maintain blood pressure. Veins act as a reservoir for blood. A person suffering from BJHMS will have fragile blood vessels because their collagen is likely to stretch and break with the slightest trauma. Bruising will occur not only at joints but areas normally free of knocks like the back of legs or forearms. Often sufferers are not even aware the injury has occurred.

Common presentations of BJHMS sufferers are:

- Joint pain: especially feet, lower back, wrists and knees
 - Postural fatigue with standing especially from the back and leg muscles
 - Tendency to fidget if expected to sit for long
 - May prefer to sleep on their front
 - Tendency to sit cross legged
 - Flat feet with a low arch profile
 - Bruise easily especially back of legs and arms
 - Clumsy as a child - always walking into objects
 - Children may be able to hyperextend their knees, or bend their thumb to the ipsilateral arm
- Surprisingly adults tend to stiffen up as they get older but the stiffness emanates from their muscles

Treatment Options:

- Strengthening exercises for core stability - multifidus and transversus abdominus muscles
- Orthoses and Footwear to support their flat feet to aid ground clearance
- Avoid contact sports. Pursue Pilates or Tai Chi or the Alexander programme
- Swimming for non painful joints

Please contact your Podiatrist for the above exercises and orthoses

