

CARE OF SYMPTOMATIC HYPERMOBILE JOINTS

Tissues, such as ligaments and tendons, support our skeletal system and hold it together. Weakness of tissue results in loose, stretchy joints in some patients. These may be painful at different times of life, and may be prone to dislocation. For some individuals, their increased height and arm and leg lengths allow them to function as first class athletes, providing their joints are stable. For others, the ordinary way of life must be modified to protect their joints, and prevent complications such as early osteoarthritis which can be the result of overuse of loose joints. The management of these problems will involve members of various professions who have special skills, each of whom has something different to offer. The first method of treatment may not always be successful, so both the patient and the management team must be prepared to explore various possibilities, and try one after the other until the most effective form of management is discovered.

The hypermobile joint becomes painful because the connective tissue stabilisation is inadequate. The joint is injured by the normal stress of use. The injured joint becomes inflamed and painful through the normal healing response to injury. Therefore, the best treatment of such joints is prevention of symptoms, through correct use of joints (for example, do not stand with your knees bent backward), through mechanical protection (for example, using elastic joint supports when playing sports), rest (a busy young mother with back ache can turn one day into two by having an hour's rest in the early afternoon), physiotherapy, medication, and surgery for more serious problems.

Joint laxity and pain may be evident in early childhood. Complaints of aching knees or other joints should be taken seriously in such children, who should not be forced to repeat activities which cause distress. Sports should be carefully chosen, avoiding those which stress joints unduly, such as trampolining or long distance running, and encouraging sports which maintain muscle strength without stressing the joints particularly, such as swimming or cricket. If joint pain interferes with sleep, or normal daily routine, then paracetamol or aspirin may be used, especially last thing at night, if joint pain awakens the child. Therapy should be discussed with the general practitioner.

In the adult, these medicines may also provide relief. Non-steroidal anti-inflammatory medication may also be tried, and provides relief in approximately 40% of cases. Medication such as Naproxen or Indocid may be prescribed by the general practitioner or rheumatologist. If a member of this class of medicines can be found which provides relief, it need not be taken all the time, but at times when joints are especially painful, such as after gardening, or a full day's shopping.

Joint and back supports may be purchased through a chemist, or provided by a physiotherapy or rheumatology department. Ankle supports worn while playing netball, for example, may diminish the child's symptoms. Knee, elbow and wrist supports are also available. A light Velcro wrap-around elastic back support may provide relief for low back pain.

Physiotherapists can help in many ways. A painful back may respond to gentle manipulation which provides temporary relief. A collar may help a painful neck. Ultrasound, laser or magnetic wave therapy (interferential) used singly or in combination, frequently during the week, may dramatically reduce pain and swelling for joint symptoms, such as swollen knees in teenaged hypermobile patients, or for ligament, tendon and bursa injuries such as tennis elbow, frozen shoulder, and painful heel. In addition, gentle exercises may be prescribed to strengthen the area following injury, or to improve posture. A good example would be lumbar isometric flexion exercises for low back pain. Some patients find learning the Alexander technique of improved posture helps their joint symptoms. Proper sitting, standing and footwear are also important, avoiding high heels.

An orthotist may be asked to provide flexible supportive soft inner soles, which can be transferred from shoe to shoe, and replaced as the foot grows in childhood, to prevent flat feet from becoming painful due to plantar fasciitis (stretched ligament on the sole of the foot), bursitis, or painful metatarsal heads, due to loss of both arches of the foot. Shoe wear should always have extra room for toes, and provide arch support. The lace-up Oxford type of shoe for the child, or the running shoe with built in arch supports, are best, whilst boots with ankle support may help lax ankles.

The rheumatologist can provide reassurance, and correct diagnosis as to the cause of joint pain. He may order X-rays of the affected regions, and blood tests to rule out rheumatoid arthritis. Occasionally, patients who have inherited genes for rheumatoid arthritis as well as genes for

hypermobility, have a more serious type of rheumatoid arthritis, which leads to early joint destruction. This must be treated aggressively with medication and rest. In approximately 5% of patients, early osteoarthritis leading to possible hip replacement for example, is a feature. If the patient knows this is a feature in his or her family, he or she should ask for early referral to a rheumatologist to discuss the best management.

Choice of suitable activities, hobbies, and vocations is important. If school sports must be avoided, such as long distance running, an alternative suitable activity such as swimming should be substituted. Suitable activities include playing musical instruments, or taking up a quieter hobby such as reading, computer games, woodwork, art, or needle work. In this way, unexpected talents may be encouraged to blossom. Activities which provide a social group should be encouraged, such as singing in a choir.

The orthopaedic surgeon will be an invaluable member of the team for more serious joint problems, such as monitoring and correcting a spinal scoliosis in the teenaged years. A very inflamed and painful joint should be treated with mechanical protection and rest. This may include external immobilisation, using a splint, cast or brace to support and protect the painful joint. Traction can be applied to the neck, back and even fingers to relieve pain, and occasionally a combination of splint and traction is more effective than either treatment alone. Prolonged joint immobilisation in the hypermobile patient does not seem to result in joint contractures which occur in the non-hypermobile patient. The hypermobile joint quickly resumes its laxity and instability even after prolonged immobilisation. Immobilisation should be kept to a minimum however, since weakening of supportive muscles will lead to prolonged recovery period.

Cortisone injected into an injured weight-bearing joint may stop the healing process. It acts quickly to reduce inflammation, and so the joint feels improved. But if the protective function of pain is removed, the patient thinks all is well, and must be warned not to destroy the joint by continued over use. Intra-articular cortisone is potentially harmful, and must be used sparingly, if at all.

When medical and supportive therapy no longer provides comfort and stability, then motion may have to be sacrificed in exchange for joint stability and freedom from pain. This is accomplished by surgical stabilisation of the painful joint by bone arthrodesis (surgical fusion of the joint). Soft tissue (ligament, tendon or joint capsule) surgery performed to stabilise defective joints often fails with the passage of time, because the defect of the joint is in the involved connective tissue being used to stabilise the joint.

Continuous search for new ways to control symptoms and still allow optimum function is of utmost importance. This necessitates frequent "brain storming" between physician or surgeon and patient, to find practical means of solving everyday problems of work and play.

Summary: The treatment of skeletal manifestations of joint hypermobility must be directed towards the enhancement of the patient's ability to live a normal and meaningful life. This must be worked out in thoughtful discussion between the patient and physician, physiotherapist, orthotist, cast technician, nurse, teacher, or anyone with needed skills. Every mind must be kept open allowing for the creation of devices or techniques to find practical solutions to every day problems. In striving towards these goals, the therapeutic process becomes an adventure that can bring great rewards to each participant. In addition, by providing solutions, each patient helps other such patients, by providing a solution which may be valuable to many others suffering from the same condition.

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