Why Tai Chi in Axial Spondyloarthritis?

By Sue Gurden

I have been teaching Tai Chi to this patient group for more than fifteen years; the thing that strikes me is how much they enjoy it and how it enables them to increase their function very quickly.

Why should this be? certainly not magic!!

If we think about the symptoms that most of these people experience, pain, stiffness, postural changes, fatigue, sometimes reduced chest expansion and general mobility (walking).

It is generally agreed that exercise has a beneficial effect on these symptoms.

“I was afraid to go out, my pain had become intolerable and I was afraid of falling. The Tai Chi classes have given me a reason to get out of bed on a Monday morning, I now go for a walk after class and at six weeks I can now manage two hours after the forty-minute class, thank you”.

This lady had obviously been struggling for some time and had tried many other forms of exercise, swimming and daily strenghtening and stretching, often recommenend in Spondyloarthritis and also afford benefits such as improved mobility, muscle strength and subsequent pain and fatigue management.

However, these exercises do not fully address the issue of balance.

Balance is the ability of the body to remain steady in a chosen position; to move smoothly and safely through small body adjustments. Postural control requires complex interactions within the musculoskeletal system, sensory and cognitive systems. Joint stiffness at spinal, hip, knee and ankle joints reduces the body's ability to right itself and reduces proprioceptive awareness. Postural changes also affect balance due to the alteration in the centre of gravity. Ankylosing Spondylitis patients have been found to have a poorer balance in comparison to healthy subjects and it is recommended that postural awareness be included in early treatment plans.

So, we get back to this lady and her fear of falling, a fear of falling is one of the biggest predictors of a fall, and the increased propensity to osteoporosis in this patient group will increase the fracture risk. Inactivity reduces one's ability to compensate and contributes to other problems, including loss of bone and muscle mass, heart disease, and obesity as well as social isolation.

Tai Chi is practiced in a normal balanced standing position, constant movement of the limbs and weight transference improves flexibility and strength in the lower limbs particularly around the knees and ankles has a positive effect on proprioception and balance reactions and on circulatory systems to joints muscles and vital organs. Co-ordinating arm movements challenges balance and improves positional awareness giving better sense of position in space, over time this is translated into daily activities. Slow repetitive movement helps to re-educate neural pathways improving the system interactions and therefore normal movement patterns.

What else? Well; this lady obviously enjoyed her Monday morning classes, certainly social interaction can have a positive psychological effect which cannot be overplayed. Tai Chi is a "mindful" exercise. Participants are encouraged to concentrate on the here and now and only on their breathing and development of their movements. This can have a calming and relaxing effect which in turn aids concentration and memory which improves pain and fatigue. Of course, the inclusion of breathing exercise throughout the programme has the added value of increasing chest expansion and vital capacity.

In short Tai Chi is an integrated form of exercise which can be included in exercise prescription at any stage of the disease.

Sue