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Tai Chi linked to improved physical capacity in certain common long term conditions

Could be useful exercise for older people with several co-existing chronic ailments, suggest researchers

The ancient Chinese exercise Tai Chi is linked to improved physical capacity among older adults with certain common long term conditions, indicates a pooled analysis of the available evidence, published online in the ***British Journal of Sports Medicine***.

Among people with breast cancer, heart failure, osteoarthritis and chronic obstructive pulmonary disease (COPD), these improvements were not at the expense of worsening pain or breathlessness, the findings show.

Tai Chi consists of slow, gentle, flowing movements that aim to boost muscle power, balance, and posture. It also includes mindfulness, relaxation, and breath control.

The researchers wanted to find out how effective Tai Chi was in long term conditions that are common among older adults. So they trawled electronic research databases for relevant studies published up to 2014, on the use of Tai Chi in people with cancer, osteoarthritis, heart failure, and COPD.

They wanted to find out if Tai Chi relieved symptoms, and improved physical capacity and quality of life in all four long term conditions.

Out of 1102 articles, 33, involving 24 studies and 1584 participants, were suitable for inclusion; 21 studies were included in the pooled analysis.

The average age of participants ranged from the mid 50s to the early 70s, while the average length of the Tai Chi training programme was 12 weeks, with most sessions lasting an hour. Tai Chi training was usually offered two to three times weekly.

The results showed that Tai Chi was associated with trends, or definite improvement, in physical capacity and muscle strength in most or all four long term conditions.

This included improvements in the six minute walking test; muscle strength, as measured by bending and stretching the knees; the time it takes to get up and move known as the TUG test; and quality of life.

Tai Chi was also associated with an improvement in the symptoms of pain and stiffness in osteoarthritis and in breathlessness in COPD. And it was associated with improved sit to stand times among patients with osteoarthritis.

This is an observational study so no definitive conclusions can be drawn about cause and effect, added to which the only cancer included in the analysis was breast cancer.

But the findings back those of previous research, and provide a reasonable starting point to look at the value of exercise programmes, such as Tai Chi, for people with several co-existing long term conditions, say the researchers.

“Tai Chi can improve some physical performance outcomes in four chronic conditions...but not at the expense of worsening pain or dyspnoea [breathlessness],” they write, adding that it “may provide a suitable exercise stimulus for people with several comorbidities,” and could be used as a complementary therapy in some long term conditions.