Pilates physiotherapy for ankylosing spondylitis patients: Impact on lung function [Pilates en pacientes con espondilitis anquilosante: repercusión en la función pulmonar]

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Aim To evaluate the impact of physiotherapy, based on the Pilates Method, on the lung function of patients with Ankylosing Spondylitis (AS). Material and methods A randomised clinical trial (RCT) was performed with 49 patients diagnosed with AS according to the modified New York criteria. Two groups were randomly established. Therapeutic Pilates-based exercise was performed by 26 patients for 17 weeks, in 90 minute sessions on alternative days, supervised by a physiotherapist. The control group (23 patients) used a conventional exercise program at home. The variables analysed were: rib cage expansion, forced vital capacity (FVC), forced expiratory volume (FEV1), and the FEV1/FVC ratio. Results No significant differences were found in the values of rib cage expansion between control and experimental groups (P=.686), while there were differences before and after intervention in the experimental group (P=.780). The values of spirometry were similar in both control and experimental groups. No-significant increase in FVC was observed in the experimental group (P=.122). Conclusions The impact of Pilates-based exercises on spirometry values and rib cage expansion is limited, although there was a tendency to improve FVC after Pilates exercises. These types of exercise protocols should be considered, for their clinical application, in specific respiratory physiotherapy. © 2017 Asociación Española de Fisioterapeutas Ankylosing spondylitis

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