# Exercise therapy for tendinopathy: a mixedmethods evidence synthesis exploring feasibility, acceptability and effectiveness

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### Primary conflicts of interest:

**Dylan Morrissey:** Trial Steering Committee chair of NIHR-funded AIR trial. **Victoria Tzortziou Brown:** Member of NIHR HSDR funding committee; prior member NIHR HTA prioritisation committee (until 2021).

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# Plain language summary

Exercise therapy for tendinopathy: a mixed-methods evidence synthesis exploring feasibility, acceptability and effectiveness

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# **Plain language summary**

Tendons are cords of strong, flexible tissue that attach muscles to bones, allowing joints to move. Tendinopathy is a common condition that can affect any tendon in the body, causing pain and limiting function. Exercise is often used to treat tendinopathy.

We examined over 500 research papers on exercise for tendinopathy. The most common tendons to be studied were the calf (Achilles), knee (patellar), elbow and shoulder. Strengthening exercise was studied most often, especially in lower-limb tendinopathy. Other types of exercise such as stretching, balance and aerobic activity were less common, but were used to some extent in the upper and lower limbs.

We found that exercise therapy is safe and beneficial for the tendinopathies that have been studied to date. Exercise may be most beneficial when combined with another intervention such as injection or electro-therapy. Strengthening exercise may be most beneficial for lower-limb tendinopathies. However, more research is needed on the type of strengthening and the dosage, such as how many exercises and how much resistance to use. Shoulder tendinopathies may benefit from exercise that targets joint flexibility and position more than strengthening.

We also found that people who receive exercise therapy for tendinopathy are generally satisfied with the effect it has on their symptoms. Finally, we found that an individualised, person-centred approach to delivering exercise therapy is valued by people with tendinopathy. They also believe that the patient-healthcare provider relationship is important for promoting the confidence and motivation people need to continue with exercise programmes, especially when they complete them independently.

Although we examined a lot of papers, many of the studies were low quality. This means there is still a need for high-quality studies to tell us how effective specific types of exercise are for specific tendinopathies. There is also a need for more studies on patients' and professionals' experiences of receiving or providing exercise for tendinopathy.

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