

This study looked at whether changing the way people walk (known as gait retraining) can help reduce knee pain and stress on the knee joint in people with knee osteoarthritis. We also tested whether using different types of real-time feedback during walking could make this training more effective.

Participants were placed into one of three groups: one group received feedback about the forces acting on their knee, another group received feedback about their walking pattern, and a third group did not receive any feedback (control group). All participants in the training groups attended weekly sessions for six weeks.

The results showed that gait retraining with biofeedback can help people change how they walk in ways that may reduce stress on the knee. Both types of feedback were useful, but they may work in slightly different ways. Some participants needed more than one session to find the most effective walking pattern for them.

We also found that these changes in walking may help reduce knee pain and improve the ability to carry out everyday activities, such as walking and moving around.

Overall, this study suggests that personalised gait retraining with feedback could be a helpful, non-surgical treatment option for people with knee osteoarthritis. The findings will help clinicians better understand how to use these techniques in practice.