

The effect of tissue flossing technique on sports and injury prevention and rehabilitation: a systematic review of recent research

ABSTRACT

Flossband, as a novel and effective tissue flossing technique, is becoming increasingly popular in the field of athletic training, sports injury prevention, and rehabilitation. The purpose of this literature review is to summarize updated evidence about the effects of flossband application on joint range of motion (ROM), pain, muscle tightness, strength, and physical functional performance as well as identify research gaps for future study. Google Scholar, PubMed, EBSCO, and Web of Science were used to search related articles. The keywords of floss bands, flossbands, floss band, tissue flossing, flossing band, voodoo floss band, voodoo floss bands, track floss, rock floss, life floss band, and Rogue voodoo floss were used to extract target articles. English journal articles, full-text available, and content related to outcome measures were included. Conference abstracts, books, case studies, guideline reviews were omitted. 23 full-text journal articles were included for further qualitative analysis after removing duplicates and deleting articles that violate the screening criterion. Flossband application on limbs, soft tissue, or joints with about 50% flossing tension or 150 mmHg wrapping pressure could have small to medium effects on the parameters of ROM, muscle stiffness, muscle strength, and physical function performance, and large effects on pain management. Most previous studies were mainly focused on the acute effect of flossband application on peripheral joints or soft tissues in healthy and active participants or well-trained athletes. Therefore, for future studies, more evidence is needed on the benefits of long-term flossband trunk application and concerning patients with various diseases.

Keyword: Flossband; Pain management; Range of motion; Tightness; Strength; Physical function performance; Fascial release