



Effect of Guided Imagery on Pain and Health-Related Quality of Life in Musculoskeletal Medicine: a Comprehensive Narrative Review

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Abstract

Purpose of Review Guided imagery (GI) is a non-pharmacological method used to reduce pain, stress, and anxiety. No comprehensive review has yet investigated the application of GI in musculoskeletal medicine, its various types, and potential mechanisms. The aim of this comprehensive narrative review was to examine the types of GI used in musculoskeletal medicine and GI effect on pain and health-related quality of life.

Recent Findings A comprehensive narrative review of the English language scientific literature, PubMed, Google Scholar, ProQuest, and PEDro databases were searched from inception until August 2020 using keywords related to GI, musculoskeletal disorders, pain, and health-related quality of life. The search results generated 133 articles. After a critical analysis, 12 publications were included in this review. GI characteristics and protocols varied significantly between studies.

Summary Based on the reviewed studies, we advocate GI as a safe, non-invasive technique that can assist in managing pain, depression, stress, fatigue, anxiety, reducing medication use, improving general well-being, wellness, and quality of life in patients with musculoskeletal disorders. We recommend further investigations of GI mechanisms.

Keywords Guided imagery · Narrative review · Pain · Musculoskeletal disorders · Health-related quality of life

Introduction

Guided imagery (GI), an easy-to-use, accessible, and effective method [1], reduces pain, stress, and anxiety and can be performed as a clinical intervention by following simple instructions. GI is widely used, and the awareness of its healing, physical and psychological benefits has increased over the past two decades [2].

The term GI refers to a wide variety of techniques, including simple visualization of images and a series of verbal

suggestions utilizing imagery, metaphors, storytelling, fantasy exploration, game playing, dream interpretation, drawing, and active imagination where elements of the unconscious are encouraged to emerge as images, capable of communicating with the conscious mind, producing a desired physical response (i.e., a reduction in stress, anxiety, or pain) [3]. According to Kosslyn [4], GI involves generating or recalling different mental images, such as the perception of objects or events, engaging mechanisms used in cognition, memory, emotional, and motor control.

GI has been viewed as a “relaxation modality” by the National Center for Complementary and Integrative Health since it can profoundly activate the body’s natural relaxation response. It is characterized by slower breathing and the lowering of blood pressure, and increased feelings of well-being [5]. A critical review by Trakhtenberg [6] suggested that GI can also influence the immune system. Most studies have examined the effect of GI by utilizing a training technique of GI lasting – 12–20 min. In a recent study of a brief GI exercise lasting only 1 to 2 min, it was found that reflecting on a short mental image increased psychosocial stability, which was expressed by the coherence of heart rate variability [7].

This article is part of the Topical Collection on *Alternative Treatments for Pain Medicine*

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