ABSTRACT

Are muscle knots causing my hip tightness and weakness?

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In this presentation, I will present the role of trigger points (TrPs) in chronic non-specific low back pain (CNSLBP). Travell and Simons define a TrP as "a hyperirritable spot in skeletal muscle that is associated with a hypersensitive palpable nodule in a taut band" (Simons et al., 1999, p. 5). Active and latent TrPs are proposed to cause restricted range of movement (ROM) and muscle weakness. Simons and Travell pioneered TrP research with their publications of "The Trigger Point Manuals" (1983 & 1992); subsequently research into TrPs has informed knowledge of musculoskeletal disorders. The prevalence of TrPs in people with CNSLBP is high; especially in the gluteus medius (GMed) muscles. CNSLBP is a complex and costly condition; with which treatment is not always successful. In this population, decreased hip ROM and hip muscle weakness are common findings. This study investigated if the presence of active TrPs was associated with these deficits in the hips, when compared with participants with latent TrPs and zero TrPs. Forty-two participants with CNSLBP underwent hip passive ROM and hip muscle strength testing; with palpation of their GMed muscles to identify the presence and type of TrPs. Analysis showed varying results regarding hip ROM and TrP status. There was an association between hip strength and TrP status. Participants with zero TrPs were the strongest and those with TrPs were weaker. In general, those with latent TrPs were the weakest. This study adds knowledge to the role that TrPs play in muscle strength and the characteristics of TrPs. This is significant for the treatment of CNSLBP and the development of more effective treatment of this multi-factorial condition.

References

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