ABSTRACT

Background and Purpose: The nervous system plays a significant role in groin/hip flexor pain which is a common complaint in the active population. Patient examinations that lack consideration of the nervous system’s involvement may result in chronic pain and dysfunctional breathing patterns due to continuously excited (also known as “up-related”) primal reflexes. Primal Reflex Release Technique™ (PRRT™) is a novel treatment paradigm that was designed to calm primal reflexes from their excitatory state. The purpose of this case series was to describe the effects of down-regulating primal reflexes using PRRT™ on pain, function, and breathing pattern dysfunction in subjects who presented with groin and hip flexor pain and exhibited hyperesthesia to TriggerRegions™ in areas of respiration.

Case Descriptions: Six subjects with acute groin and/or hip flexor pain were examined using a battery of tests including muscle integrity strength and range-of-motion (ROM) measurements, special orthopedic tests, breathing functionality and PRRT™ rib palpation assessments. If subjects were determined to be potential PRRT™ responders through PRRT™ rib palpation assessments, the technique was performed according to PRRT™ guidelines. Outcome measures including the Numeric Pain Rating Scale (NPRS), Patient Specific Functional Scale (PSFS), the Global Rating of Change (GRoC) Scale, and the Disability in the Physically Active (DPA) Scale were collected to determine the effects of the treatment.

Outcomes: All subjects demonstrated full resolution of pain as reported on the Numeric Pain Rating Scale, and the change was statistically (p = 0.001) and clinically significant. All subjects returned to optimal function as reported on the Patient Specific Functional Scale, and the change was both clinically (minimal detectable change) and statistically significant (p = 0.001). All subjects returned to normal breathing function as observed through the seated assessment of lateral expansion test. The number of treatments (mean = 1.83 ± 1.16) and time to the resolution of symptoms was minimal (mean = 2.833 ± 2.56 days).

Discussion: By assessing and treating abnormal breathing patterns, postulated to be a result of a sustained excitatory nervous system, subjects returned to full activity, without pain, in less than three days. After a two-week follow-up, subjects remained functionally pain free. Considering the state of the nervous system in the presentation of musculoskeletal pain and not focusing all treatment on local muscle structures may be beneficial. A multifaceted assessment approach is needed to determine other pain factors.

Level of Evidence: Level 4

Key Words: Adductor pain, Breathing Assessment, Primal Reflexes

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Conflict of Interest Statement: The authors do not have any conflict of interest, financial or otherwise, to report pertaining to the study.