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## CLINICAL COMMENTARY

# A CLINICAL GUIDE TO THE ASSESSMENT AND TREATMENT OF BREATHING PATTERN DISORDERS IN THE PHYSICALLY ACTIVE: PART 1

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### ABSTRACT

**Background:** Appropriate assessment and interventions for breathing patterns prior to assessment of the patient's musculoskeletal complaint may be beneficial. Breathing pattern disorders (BPDs) are remediable and influenced by biochemical, biomechanical, psychological, and/or unknown factors. The purpose of this clinical commentary is to demonstrate the integration of a BPD assessment into a standard clinical musculoskeletal orthopedic examination.

**Clinical Assessment:** The observation of a patient's breathing pattern begins when they enter the clinic, is followed by palpation and orthopedic tests, which allows for proper classification of BPDs.

**Outcomes:** Disease-oriented measures guide the assessment and classification of BPD, while patient-oriented measures describe clinically important differences among patient values.

**Classification:** There are many possible variations of classifications of BPD, however, six primary dysfunctions found in the literature have become the foundation of the BPD assessment.

**Discussion and Conclusion:** Restoring proper breathing mechanics and neuromuscular motor control patterns during breathing may result in a decrease in pain, improved patient outcomes, and overall patient well being associated with their primary musculoskeletal complaint. A comprehensive evaluation of breathing patterns, as a part of an orthopedic examination, may guide a clinician in providing effective and appropriate treatments to decrease pain and improve function.

**Level of Evidence:** 5

**Keywords:** Dysfunctional movement patterns; startle reflex; musculoskeletal pain

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