

Abstract

This thesis focuses on lower esophageal sphincter and low back pain in patients with gastroesophageal reflux disease (GERD). Common etiological factor of both GERD and low back pain frequently present in GERD patients is diaphragm dysfunction. Diaphragm fulfils respiratory, postural and sphincter functions, all these functions are interrelated which we benefit from in therapy.

Theoretical section presents anatomy of the esophagus, upper and lower esophageal sphincters, diaphragm, follows etiology, diagnostic methods and treatment of GERD and LBP as well as common therapeutical approach by means of postural and respiratory physiotherapy. Basic principles of Dynamic Neuromuscular Stabilization and Respiratory muscle training are presented and their use in the treatment of GERD and LBP.

Practical section contains a case study of a patient diagnosed with GERD, kinesiological analysis, high resolution manometry of esophagus and therapy focused on diaphragm activation achieved by improving trunk stabilization and by optimising patient's breathing stereotype.