



LETTER TO THE EDITOR

Reply to Iovino and Ciacci: Respiratory physiotherapy in GERD: A proof-of-concept study on the increment of LES pressure



We thank Iovino and Ciacci for their constructive comments regarding our article "Respiratory physiotherapy can increase lower esophageal sphincter pressure in GERD patients" and welcome the opportunity to respond.

We agree that investigating symptoms, reflux pattern and quality of life in GERD patients are mandatory for evaluating this treatment applicability. However, the objective of our study was to evaluate whether an increase in diaphragmatic thickness due to respiratory training with "threshold inspiratory muscular training (IMT)" would affect hypotensive lower esophageal sphincter (LES).

Moreover, all patients were already diagnosed with GERD according to clinical definition, endoscopic and pHmetric findings. Since this was the first study to verify the effect of IMT on LES pressure, our concern was to use an index to evaluate the improvement in diaphragmatic thickness.

It is worth underlining that the knowledge of the results of this original study encourage us to go forward in a long term prospective study to confirm this findings with larger samples of subjects to determine the clinical impact according to quality of life scores, pressure maintenance, and reflux testing defined by pH-metry.

Therefore, it would be interesting to test the response of the increase of basal LES pressure post-treatment

according to symptom resolution and patient satisfaction not only in non-erosive GERD and healed esophagitis,¹ but also in specific group of patients with non acidic reflux or extraesophageal manifestations of reflux disease.

Conflict of interest statement

None declared.

Reference

1. Eherer AJ, Netolitzky F, Högenauer C, et al. Positive effect of abdominal breathing exercise on gastroesophageal reflux disease: a randomized, controlled study. *Am J Gastroenterol* 2012 Mar; **107**(3):372–8. <http://dx.doi.org/10.1038/ajg.2011.420> [Epub 2011 Dec 6].

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12 November 2012