# CORRESPONDENCE

# Achalasia—a Disease of Unknown Cause That Is Often Diagnosed Too Late

by PD Dr. med. Ines Gockel, Dr. med. Michaela Müller, PD Dr. med. Johannes Schumacher in volume 12/2012

## **Two Arguments in Favor of Surgery**

A particularly positive feature of the article by Gockel and colleagues was the fact that the therapeutic options were presented in a balanced way; endoscopic treatment received fair attention, although the lead author is a surgeon. In particular, the authors refrained from going into great detail about the technical problems of balloon dilatation in the cited study (1) and the ensuing deserved criticisms relating to the entire study arm, since these are certainly not representative for the balloon dilatation approach.

However, as a gastroenterologist and specialist in internal medicine I am surprised that two arguments in favor of surgery, especially in younger patients, were not made clear. Firstly, published follow-up data for endoscopic treatment are mostly available for two years only (up to a maximum of five years), whereas long-term successes of five and 10 years have been documented for surgical treatment. Secondly, the surgical approach in addition to simultaneous (semi-)fundoplication, which is carried out as standard treatment nowadays, provides a solution to the reflux problem that is associated with any treatment.

Even though—as in the recent 2012 annual meeting of the German Society for Endoscopy and Imaging Procedures—endoscopy is often credited as the primary therapeutic approach, surgery is an important alternative in patients refractory to treatment and in younger patients, whose advantages are its high success rates and the long-term therapeutic success.

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#### Prof. Dr. med. Thomas Rabenstein

Diakonissen-Stiftungs-Krankenhaus Speyer thomas.rabenstein@diakonissen.de

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## **No New Therapeutic Approach**

In actual fact, achalasia affects the entire esophagus, which is paralyzed (chalasia=relaxation), much too long, and subject to muscular hypertrophy; esophageal folds are therefore lacking, as is correctly shown in the figure accompanying the article. Impedance manometry confirms the fact that the entire esophagus is affected: no spasmolytic drugs will help, the esophagus is passively closed, which is shown by the elastance pressure volume curve.

The esophagus does not have a lower sphincter but a centimeter-long muscular elastic closure segment consisting of two spiral shaped tubes that are inconspicuously embedded in the muscle wall (and act as an extension splint/brace. The muscle fibers in the esophagus are arranged in an elongated spiral in an oval shape and transport food.

If a botulinum toxin injection is carried out the endoscope penetrates into this long segment and unintentionally distends it. Botox paralyzes only skeletal muscles. In human beings, smooth muscles in a spiral arrangement are found in the distal esophagus (2).

Myotomy always splits only the easily detachable, very thick outer layer of the elastic esophageal closure segment and not the thinner, inner layer that has grown together with the epithelium. The inner tube therefore remains paralyzed but does not act as an obstruction any longer.

The studies do not provide any new treatment for achalasia, merely for reflux esophagitis—by tightening the slack closure mechanism. The existing comprehensive literature does not include the underlying etiology that explains all these disorders.

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## em. Prof. Dr. Dr. h. c. mult. F. Stelzner Rheinische Friedrich-Wilhelms-Universität Universitätsklinikum Bonn

anita.groell@ukb.uni-bonn.de

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The authors of the article have chosen not to publish a reply.