



# IS IT TIME FOR A NEW DEFINITION OF FAILURE OF ACHALASIA'S SURGICAL TREATMENT?



Georgia Doulami, Stamatina Triantafyllou, Zoi Vrakopoulou, Eleftheria Kleidi, Nikolaos Kokoroskos, Georgios Zografos, Dimitrios Theodorou.

Department of Foregut Surgery, 1st Propaedeutic Surgical Clinic, "Hippokration" General Hospital, National and Kapodistrian University of Athens, Greece.

## ➤ OBJECTIVES

Failure of achalasia's surgical treatment is not accurately defined in literature, but most investigators accept an Eckardt score 3 or higher as treatment failure. However, one of the limitations of Eckardt score is that it does not include patients' satisfaction or need for further therapeutic intervention. Furthermore, Eckardt score has not been yet validated in a postsurgery achalasia population. Our aim is to propose a novel achalasia score (NAS) that could identify surgical treatment failure and discriminate patients who need further treatment after laparoscopic Heller myotomy and Dor fundoplication (LHM-D).

## ➤ METHODS

From January 2008 LHM-D has been applied to patients with achalasia. Patients' follow up includes history and clinical examination, Eckardt score, OES-18 questionnaire and Visick score. Patients with an Eckardt score of 3 or higher are further investigated with a barium swallow and manometry (conventional and high-resolution).

Eckardt score, OES-18 and Visick score were combined in order to create the NAS. Answers in OES-18 and Visick score were scored with 1 being the best and 4 (or 5 for the first question of Visick score) being the worse. Points of all three scores were summed up resulting in NAS (range from 19 to 93).

## ➤ RESULTS

LHM-D was performed in 69 patients with achalasia. Mean follow up time was 29 months. According to Eckardt score, 13% of patients (n=9) should be considered as treatment failure –having a score of 3 or higher. Further investigation with barium swallow and manometry was advised in these 9 patients.

Overall NAS had a median value of 22 (range=19-61). Patients with Eckardt score lower than 3 had a NAS of 21.53 whereas patients with Eckardt score 3 or higher had a NAS of 34.22 (p=0.008).

Of 9 patients, 2 declined the offer for further investigation being satisfied with their disease-related quality of life. Indeed, both patients had lower NAS -although not statistically significant- compared to the remaining 7 patients (26 vs 36.6, p=0.245). Investigation of the remaining 7 patients revealed dilation of the esophagus and delayed bolus transit time as evaluated by the barium swallow and increased LES mean resting pressure, as evaluated by manometry.

## ➤ DISCUSSION

Failure of surgical treatment of achalasia has not been accurately defined in literature. Eckardt score has been widely used and is a "common language" in order to identify patients with symptoms (dysphagia, chest pain, regurgitation and weight loss) after surgery. However, a validation of the postoperative use of Eckardt score does not exist, thus the score may not always reflect treatment failure.

We believe that an important limitation of Eckardt score is that it has a narrow range (0-12) and definitions of "occasional", "daily" and "each meal" are unclear or do not apply in some patients. A more thorough evaluation and scoring system of symptoms may better reflect the occurrence of symptoms postoperatively. In addition, some common problems that occur postoperatively, such as dysphagia when consuming certain foods or cough, are not addressed by Eckardt score.

Nowadays, patients satisfaction emerged as an important criterion of treatment success or failure. Patients' quality of life and satisfaction from surgical intervention should be considered as co-factors of achalasia's surgical treatment failure.

There is need for a new achalasia score in order to accurately define failure of surgical treatment. The new score should overcome the limitations of Eckardt score and should identify patients in need of further treatment.

## ➤ CONCLUSION

The NAS we present considers a variety of parameters rather than just patients' symptoms and due to its wide range, adequate identification of patients in need of further treatment could be possible.

