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IMAGES IN PAEDIATRICS

Pediatric achalasia: Successful resolution by peroral endoscopic myotomy (POEM)

Acalasia pediátrica: Resolución exitosa mediante miotomía endoscópica peroral (POEM)

Aída Lorente López[a,*], **Ruth García Romero**[a,b], **Ignacio Ros Arnal**[a], **Hugo Uchima Koecklin**[c]

[a] *Servicio de Pediatría, Hospital Universitario Miguel Servet, Zaragoza, Spain*
[b] *Instituto de Investigación Sanitaria de Aragón (IIS Aragón), Hospital Universitario Miguel Servet, Zaragoza, Spain*
[c] *Servicio de Gastroenterología, Hospital Universitari Germans Trias i Pujol, Badalona, Barcelona, Spain*

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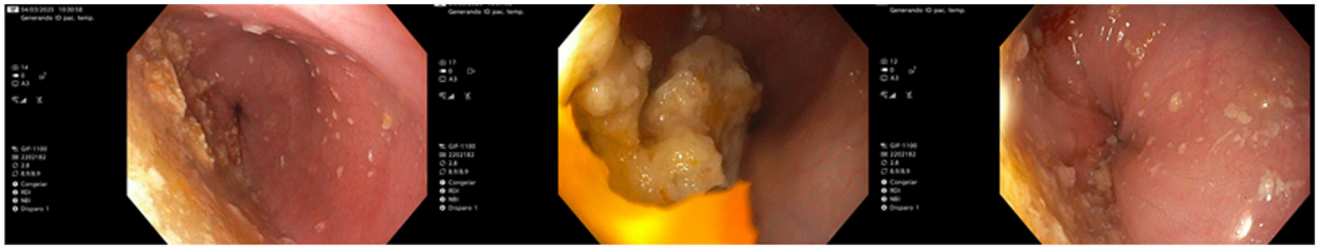

Figure 1 Upper gastrointestinal endoscopy: dilated esophagus with substantial food retention.

We present the case of a patient aged 13 years with a history of type 1 diabetes and poor metabolic control. In the two months prior to admission, the patient experienced daily epigastric pain, dysphagia on intake of both solids and liquids, and postprandial vomiting.

A gastroscopy was performed (Fig. 1; Appendix B, Video 1), revealing significant dilation of the distal esophagus with a large amount of food trapped in the esophagus.

The evaluation was completed with an esophagogram, which revealed a markedly dilated esophagus with decreased peristalsis and narrowing of the esophagogastric junction (Fig. 2). The esophageal manometry findings were

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* Corresponding author.
E-mail address: aida96lorente@gmail.com (A. Lorente López).

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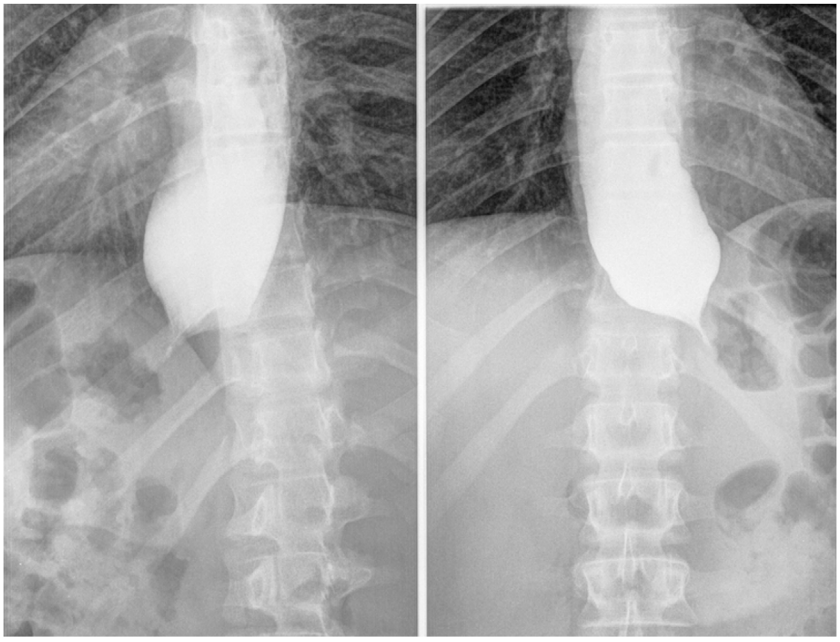

Figure 2 Esophagogram: esophageal dilation with the distal tapering (bird's beak) characteristic of achalasia.

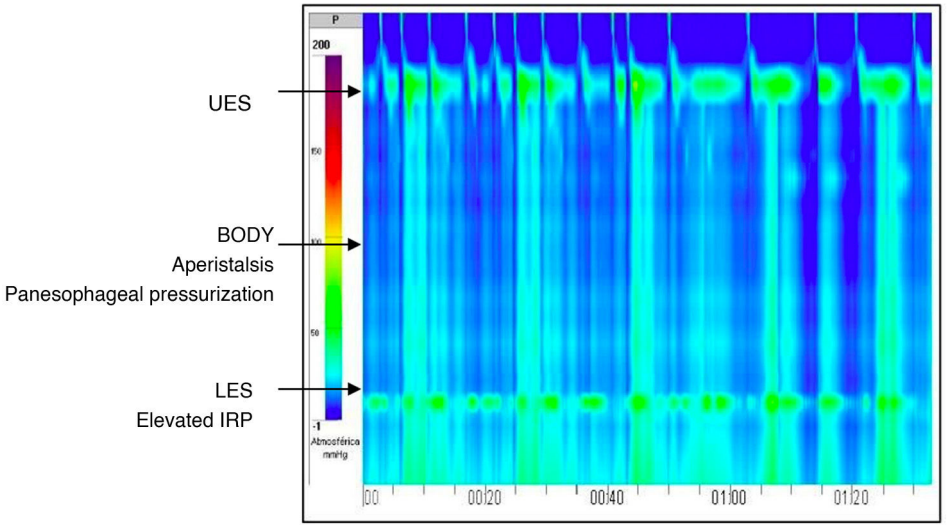

Figure 3 Esophageal manometry: findings consistent with achalasia, intermediate between types II and I in the Chicago Classification. Complete absence of peristalsis in the esophageal body in 100% of swallows. Elevated integrated relaxation pressure (IRP) at the esophagogastric junction (EGJ) indicating incomplete relaxation of the lower esophageal sphincter (LES). In some swallows, especially with the patient in the upright position, there was evidence of panesophageal pressurization, defined as a uniform increase in intraluminal pressure throughout the esophageal body, and typical of type II achalasia. The co-occurrence of aperistalsis and inconsistent panesophageal pressurization suggests progression from achalasia type II toward type I. Normal basal pressure at the upper esophageal sphincter (UES), with adequate relaxation and preserved pharyngoesophageal coordination.

consistent with achalasia progressing from type II to type I (Fig. 3).

The patient underwent two balloon dilations, but there was no clinical improvement. Due to the lack of response, the decision was made to perform a peroral endoscopic myotomy (POEM).

The POEM technique consists in the creation of an endoscopic submucosal tunnel along the distal esophagus, passing over the gastroesophageal junction to then cut the circular muscle fibers of the lower esophageal sphincter (LES). This intervention, which is minimally invasive, has been found to be very efficacious and safe for treatment of achalasia, even in children.[1–3] The patient showed marked clinical improvement after the surgery, confirming the effectiveness of the procedure.

Declaration of competing interest

The authors have no conflicts of interest to declare.

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi: https://doi.org/10.1016/j.anpede.2026.504140.

References

1. Zhong C, Tan S, Huang S, Peng Y, Lü M, Tang X. Clinical outcomes of peroral endoscopic myotomy for achalasia in children: a systematic review and meta-analysis. Dis Esophagus. 2021;34(4):doaa112, http://dx.doi.org/10.1093/dote/doaa112, pubmed.ncbi.nlm.nih.gov+10pubmed.ncbi.nlm.nih.gov+10link.springer.com+10.
2. Peng D, Tan Y, Li C, et al. Peroral endoscopic myotomy for pediatric achalasia: a retrospective analysis of 21 cases with a minimum follow-up of 5 years. Front Pediatr. 2022;10:845103, http://dx.doi.org/10.3389/fped.2022.845103, frontiersin.org+1pmc.ncbi.nlm.nih.gov+1.
3. Bi YW, Lei X, Ru N, et al. Per-oral endoscopic myotomy is safe and effective for pediatric patients with achalasia: a long-term follow-up study. World J Gastroenterol. 2023;29(22):3497–507, http://dx.doi.org/10.3748/wjg.v29.i22.3497.