

EDITORIAL

## Flexible endoscopic cricopharyngeal myotomy — The gold standard for the management of Zenker's diverticulum

The prevalence of Zenker's diverticulum (ZD) is difficult to estimate. If we focus on some published data, it may be as low as 2 new cases per 100,000 inhabitants per year in the United Kingdom (1), which is in contrast with the feeling in some endoscopy units, that this condition's prevalence is increasing year after year. Prevalence likely remains the same as ever, but the addition of factors such as population ageing, optimal diagnostic care, availability of effective endoscopic management, increased awareness, and cumulative experience in some endoscopy teams, may well have increasingly brought this condition to our attention in our daily practice. This is reflected by an unbelievable 18 ZDs over the last 18 months, as discussed in the manuscript by Dr. de la Morena, reported in this issue of *The Spanish Journal of Digestive Diseases (Revista Española de Enfermedades Digestivas)* (2).

The profile of patients with ZD is also changing. Traditionally, ZD involved ageing patients who had suffered from oropharyngeal dysphagia for many years, and usually presented when other major complications, including nutritional deficiency or aspiration pneumonia, developed. Today, these patients seek help in much earlier stages of their disease, hence being younger, with smaller though not less discomforting diverticula. Smaller diverticula represent a new challenge for endoscopic management since cut length adequacy is key to prevent perforation; therefore, mastering the technique is crucial when it comes to treating these patients.

Thanks to the ingenuity of Dr. Jacques Devière, at Erasmus Hospital in Brussels, a flexible diverticuloscope is available to us since early in this century for the performance of flexible cricopharyngeal myotomy/septotomy (CPMS) (3). Currently, there is some debate as to whether this device should be used (4). On the one hand, some teams advocate its use based on stability and cricopharyngeal muscle exposure grounds; on the other hand, other groups would rather use an oblique cap alone, claiming to save up on diverticuloscope positioning, as well as a wider range of movement. In my view, diverticuloscope placement is usually straightforward even for an intubated patient, and particularly so when using minor modifications as discussed in this manuscript (2), with the help of a guidewire. Other teams paint the diverticuloscope's distal end aiming to improve endoscopist orientation, and even trim the diverticular valve when operating on shallow diverticula. I totally agree with Dr. de la Morena that this device represents a turning point for flexible CPMS, and I believe its systematic use should be normative, particularly for patients undergoing the procedure under sedation, which results in reverse isolation of the airways, which may be crucial in the presence of bleeding complications. Furthermore, hybrid flexible CPMS approaches using parallel-to-the-endoscope cutting and sealing devices may only be performed with a diverticuloscope. Only in patients where a diverticuloscope cannot be positioned, be it because of an extremely lateral or previously treated diverticulum, or as a result of a stiff neck, is using a cap warranted for CPMS; as a personal recommendation, the patient must always be intubated under general anesthesia in order to avoid highly uncomfortable situations should bleeding occur.

The cutting system to be used is another undefined point for this technique. Currently, no ideal system is likely available allowing to cut and seal the septum in a straightforward manner. The manuscript reflects the technical evolution regarding the selected cutting devices, with a Huibregtse needle knife papillotome up to 2007, and a Zimmon papillotome subsequently. This paper reports 30% of bleedings, but this is primarily due to the bleeding definition employed, as other studies only count bleeding events leading to emergency endoscopy or admission, thus reducing this percentage to 1% (4). Hybrid procedures using computerized cutting and vessel sealing (Ligasure type) systems have proven extra effective to decrease, in my opinion, both procedure-emergent bleeding events and procedure length, although further prospective studies are needed to demonstrate this. However, the varied morphology of diverticula and the coming to terms with previously treated diverticula advise that endoscopy units caring for these patients be familiar with various cutting systems.

The last technical item in this paper by Dr. de la Morena, which I'd like to highlight, is the consistent use of hemoclips to close the incision's distal end from 2012 on, in order to prevent perforation. Until a prospective study is carried out that shows hemoclips to reduce perforations, I feel common sense should be in order. Thus far no complications have been reported with the use of hemoclips, and hemoclips induce no patient complaints, hence I agree their use should be widespread, particularly for lateralized or smaller diverticula. I would even dare to suggest that rotating hemoclips should be used to ensure proper orientation during their placement.

If we exclude some rare ZD-related clinical issues, including intradiverticular bleeding and intradiverticular malignancy, which would require a different approach, we may safely say that this manuscript by Dr. de la Morena, together with many other similar

experiences over the last few years (4-6), *clearly demonstrates that flexible CPMS currently represents, in terms of efficacy and low morbidity, the gold standard approach for the management of ZD.*

Diego Juzgado-Lucas

*Department of Digestive Diseases. Clínica Quirón. Madrid, Spain*

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