

Endoscopic treatment of Zenker's diverticulum

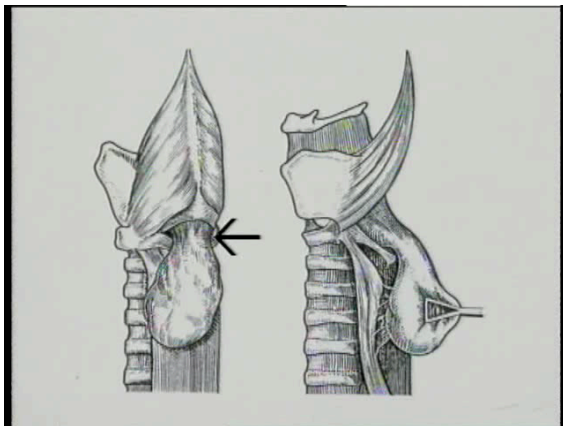
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Zenker's diverticulum and Surgery

	Open-neck surgery	Peroral diverticulotomy
Operative time (min)	88 ± 35	26 ± 16
Hospital stay (days)	5.2 ± 1.0	1.3 ± 0.6
Time to oral intake (days)	5.1 ± 1.2	0.8 ± 0.3
Resolution of symptoms	100%	100%
Complications	0%	0%
Hospital charges (USD)	11,439	3,589

P < 0.05

Smith et al, Arch Otolaryngol Head Neck Surg, 2002;128:141-4

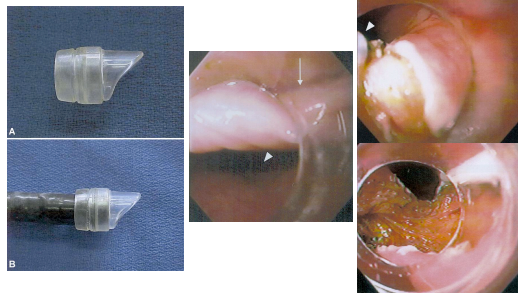


Zenker 's diverticulostomy: Rigid diverticuloscope (N=80)

Mean age 73 (42-97) years

<u>Symptoms</u>	<u>Frequency</u>	<u>% solved</u>
Dysphagia	96%	92%
Regurgitations	93%	91%
Cough	63%	94%
Weight loss	43%	91%

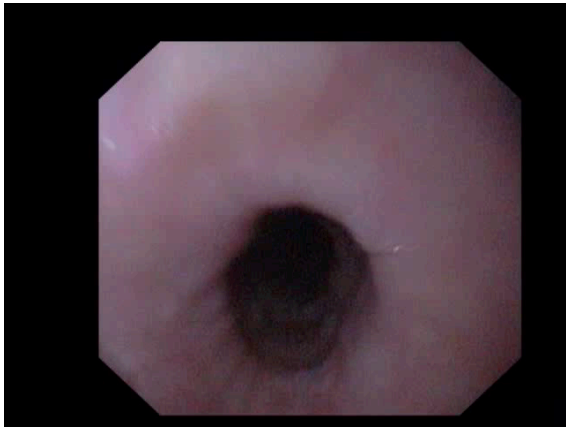
Zenker's diverticulostomy: Oblique-end hood



Sakai et al, GIE 2001;54:760-3

Soft diverticuloscope



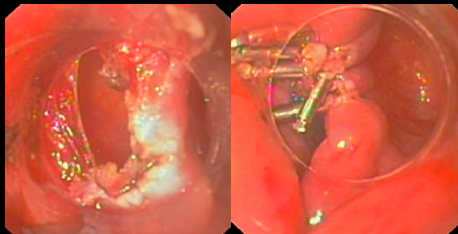


Zenker's diverticulostomy: Soft diverticuloscope (N = 30)

- Large (> 4 cm) diverticulum: 18 (60%)
- 1 session in all cases
- Resolution of symptoms
 - Complete and persisting at 12.5 mo: N=28
 - Incomplete: N=1; recurrence at 1 yr: N=1 (CO₂ laser)
- Complications : 3 mild / 1 severe *

*Pneumonia (n=2); subcutaneous emphysema, mediastinitis *Evvard et al, GIE 2003;58:116-20*

Technical changes: + clips

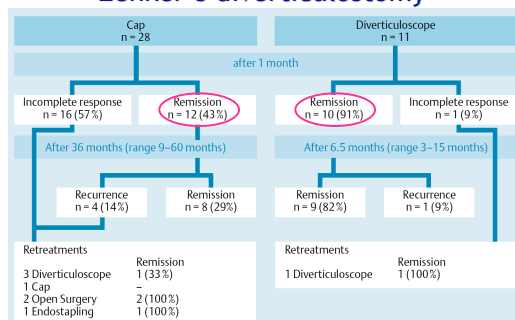


New technique: Soft diverticuloscope + Clips (N=87)

- Complete symptoms' resolution: 91%
 - Failure of diverticuloscope placement : N=1
 - Need for a second treatment : N=7
- Complications : 1 (7 days AB IV)
- Outpatient treatment: 35 (82%) of the last 42 cases

Brussels 2002-2006

Cap-assisted vs diverticuloscope-assisted Zenker's diverticulostomy

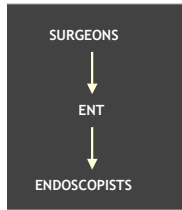


Costamagna et al, Endoscopy 2007;39: 146-52

Treatment of Zenker's diverticulum

Author	N	Perforation (%)	Follow-up (mo)	Clinical resolution
Open surgery (review)				
. Aly, 2004	1686	6	16 (5-40)	91%
Endostapling (review)				
. Aly, 2004	576	2.6	17 (5-59)	94%
Cap-assisted				
. Sakai, 2001	10	0	2-12	100%
. Costamagna, 2001	9	11	NA	NA
. Vogelsang, 2005	30	23*	10 (2-24)	Improved †
. duVall, 2005	15	7	15 (2-35)	79%
Diverticuloscope-assisted				
. Evrard, 2003	30	7	12 (3-34)	93%
. Costamagna, 2007	11	0	6.5 (3-15)	82%
. Brussels	87	1	12	91%

*Not severe (undetected at gastrografin swallow; resolved with 7-d course of antibiotics)
† P<0.001 (multiple sessions)



Explain to the patient:

- Advantages/disadvantages of each technique
- Which technique is favored due to local expertise

Cost/effectiveness?
