

Patologia benigna del giunto Gastro- Esofageo: verso un approccio integrato multidisciplinare

Trattamento endoscopico: POEM



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Riunione della società medico-chirurgica
Ottobre 2018

Terapia dell'acalasia

- Terapia medica: nitrati, β -bloccanti e inibitori delle fosfodiesterasi (non efficace, non raccomandata)
- Terapia endoscopica: tossina botulinica, dilatazione pneumatica e POEM (efficace, raccomandata)
- Terapia chirurgica: Heller miotomia (efficace, raccomandata)

Diseases of the Esophagus (2018) 31, 1–29
DOI: 10.1093/dote/doy071

DISEASES OF THE ESOPHAGUS

ISDE The International Society for Diseases of the Esophagus

Guideline

The 2018 ISDE achalasia guidelines

G. Zaninotto,¹ C. Bennett,² G. Boeckstaens,³ M. Costantini,⁴ M. K. Ferguson,⁵ J. E. Pandolfino,⁶ M. G. Patti,⁷ U. Ribeiro, Jr,⁸ J. Richter,⁹ L. Swanstrom,¹⁰ J. Tack,³ G. Triadafilopoulos,¹¹ S. R. Markar,¹ R. Salvador,⁴ L. Faccio,¹² N. A. Andreollo,¹³ I. Cecconello,¹⁴ G. Costamagna,¹⁵ J. R. M. da Rocha,⁸ E. S. Hungness,¹⁶ P. M. Fisichella,¹⁷ K. H. Fuchs,¹⁸ I. Gockel,¹⁹ R. Gurski,²⁰ C. P. Gyawali,²¹ F. A. M. Herbella,²² R. H. Holloway,²³ M. Hongo,²⁴ B. A. Jobe,²⁵ P. J. Kahrilas,⁶ D. A. Katzka,²⁶ K. S. Dua,²⁷ D. Liu,²⁸ A. Moonen,³ A. Nasi,¹⁴ P. J. Pasricha,²⁹ R. Penagini,³⁰ S. Perretta,³¹ R. A. A. Sallum,⁸ G. Sarnelli,³² E. Savarino,⁴ F. Schlottmann,³³ D. Sifrim,³⁴ N. Soper,¹⁶ R. P. Tatum,³⁵ M. F. Vaezi,³⁶ M. van Herwaarden-Lindeboom,³⁷ T. Vanuytsel,³ M. F. Vela,³⁵ D. I. Watson,³⁸ F. Zerbib,³⁹ S. Gittens,⁴⁰ C. Pontillo,⁴¹ S. Vermigli,⁴¹ D. Inama,⁴¹ D.E. Low⁴²

Inoue H: l'inventore della POEM

Digestive Endoscopy 2018; **30**: 563–579

doi: 10.1111/den.13239

Guideline

Clinical practice guidelines for peroral endoscopic myotomy

Haruhiro Inoue, Hironari Shiwaku, Katsuhiko Iwakiri, Manabu Onimaru, Yasutoshi Kobayashi, Hitomi Minami, Hiroki Sato, Seigo Kitano, Ryuichi Iwakiri, Nobuo Omura, Kazunari Murakami, Norio Fukami, Kazuma Fujimoto and Hisao Tajiri

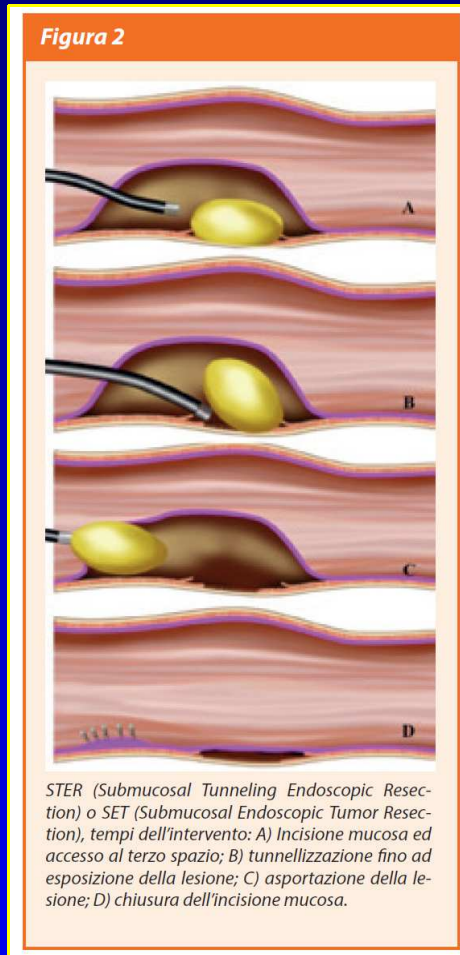
Japan Gastroenterological Endoscopy Society, Tokyo, Japan



F. Azzolini

Peroral endoscopic myotomy

Endoscopia del III spazio

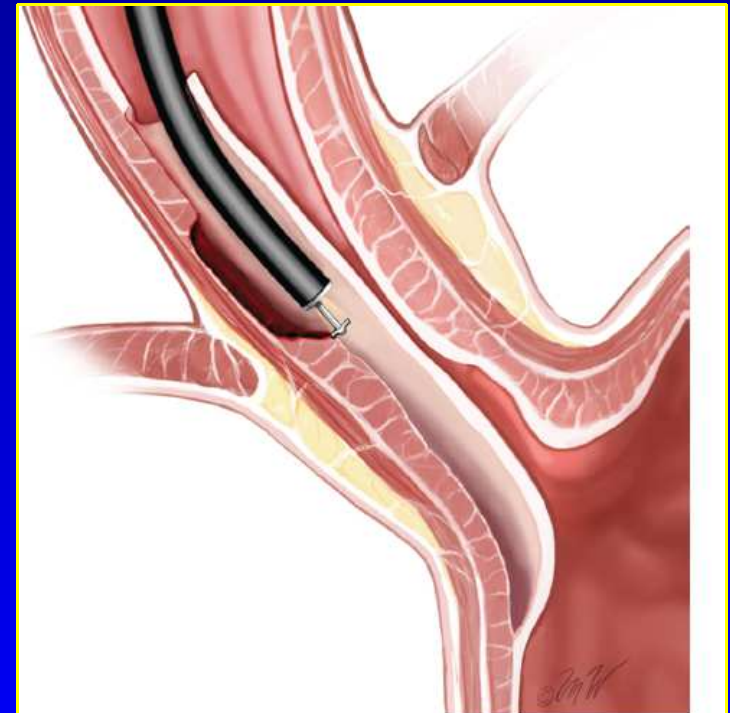
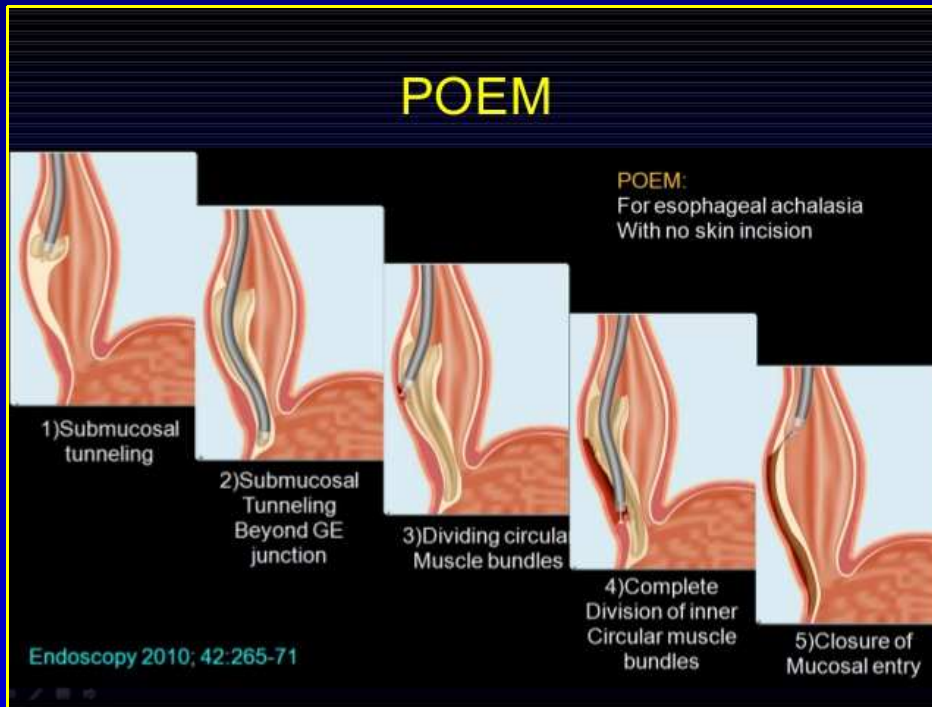


- STER: submucosal tunneling endoscopic resection
- SET: submucosal endoscopic tumor resection
- NOTES: natural orifices transluminal endoscopic surgery

Tecnica della POEM

- Procedura eseguita in anestesia generale
- Tempo tra 45-180 min
- Incisione della mucosa e formazione di tunnelizzazione sottomucosa
- Sezione dello strato muscolare circolare (e in parte longitudinale)
- Estensione per 6-15 cm fino 2 cm sotto il cardias
- Chiusura della breccia con clip

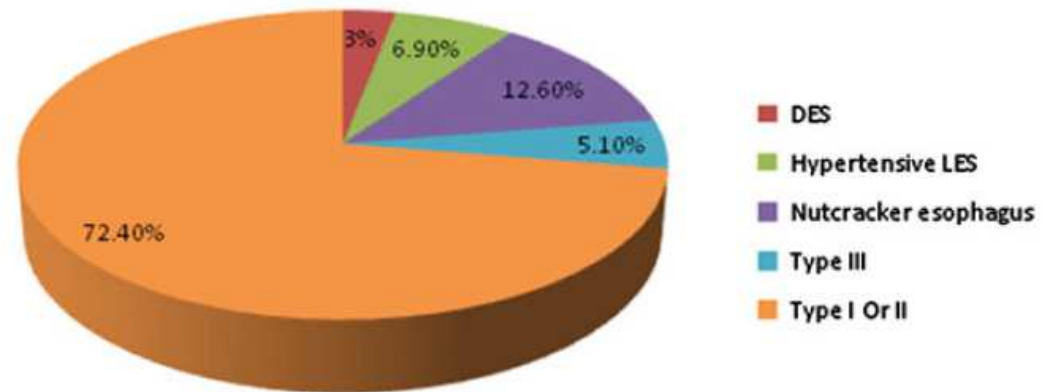
Peroral endoscopic myotomy



Source: D. J. Sugarbaker, R. Bueno, Y. L. Colson, M. T. Jaklitsch, M. J. Krasna, S. J. Mentzer, M. Williams, A. Adams: *Adult Chest Surgery*, 2nd Edition: www.accesssurgery.com
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Indicazioni alla POEM

Surg Endosc (2013) 27:3322–3338



Può essere eseguita in pz di età variabile
tra 3 e <80 anni

Complicanze della POEM

Adverse Events	No (%)
Minor technical AEs with minimal clinical impact	
Capnoperitoneum requiring intraprocedural venting	70 (8.3%)
Inadvertent mucosal perforation of mucosal flap	56 (6.7%)
Premature perforation of muscle layer at time of submucosal tunnel creation	20 (2.4%)
Patients with severe, non-fatal AEs (No/% of patients with any of below) resulting in ICU stay, readmission within 30 days, surgical conversion, surgical/IR/other intervention, prolongation of hospitalization to >5 days, IV antibiotics for >5 days, blood transfusions or disability requiring a higher level of care after discharge than prior to POEM	27 (3.2%)
Prolonged Hospitalization events (>5 days)	21 (2.5%)
IR/nonsurgical invasive procedure to treat AE	16 (1.9%)
Intensive Care Unit admissions	10 (1.2%)
Readmissions to the hospital	9 (1.1%)
Bleeding/Hematoma into Tunnel requiring Blood transfusion	8 (1%)
Cardiac Arrhythmia	6 (0.7%)
Pneumothorax, Hemothorax, Hydrothorax	5(0.6%)
Pneumonia or respiratory issue within 30 days of POEM	2 (0.2%)
Leak noted on post POEM imaging or endoscopy	2 (0.2%)

Non sono stati riportati decessi correlate alla POEM

Laparoscopic Heller Myotomy Versus Peroral Endoscopic Myotomy (POEM) for Achalasia

A Systematic Review and Meta-analysis

Francisco Schlottmann, MD, Daniel J. Lockett, BS,† Jason Fine, ScD,† Nicholas J. Shaheen, MD, MPH,‡
and Marco G. Patti, MD**

Ann Sur 2018; 267: 451-60

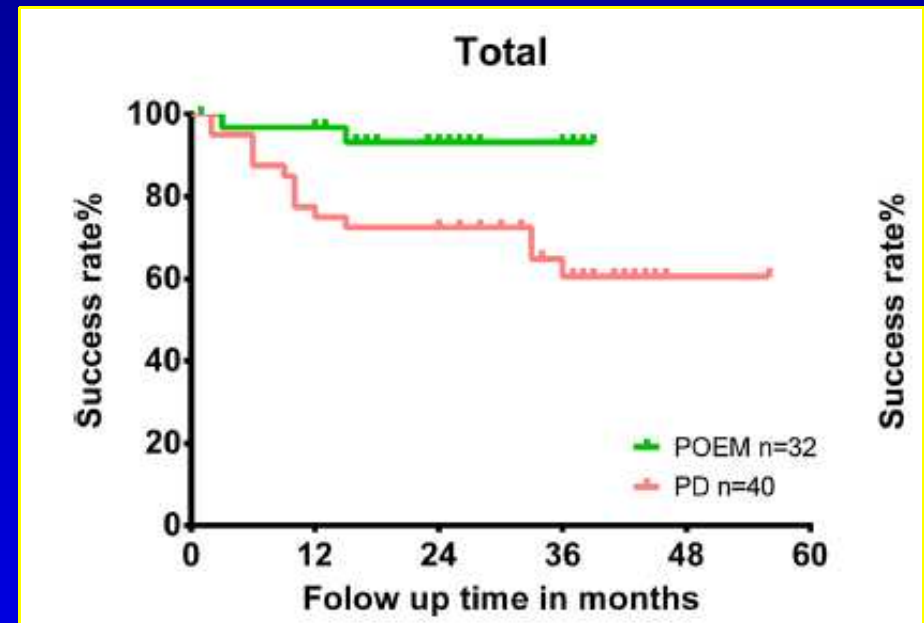
- 1958 pz, follw-up medio 41.5 vs 16.2 mesi, età media 46 aa
- Miglioramento della disfagia: POEM 93.2%vs 87.7 LHM (ns)
- Sintomi di GERD: POEM 18.5 vs 17.5% LHM
- Presenza di GERD: POEM 22.4 vs 11. LHM
- Mortalità e morbidity molto basse e simili

Peroral endoscopic myotomy compared with pneumatic dilation for newly diagnosed achalasia

Fandong Meng^{1,2,3} · Peng Li^{1,2,3} · Yongjun Wang^{1,2,3} · Ming Ji^{1,2,3} ·
 Yongdong Wu^{1,2,3} · Li Yu^{1,2,3} · Yinglin Niu^{1,2,3} · Fujing Lv^{1,2,3} · Wei Li^{1,2,3} ·
 Wenyan Li^{1,2,3} · Huihong Zhai^{1,2,3} · Shanshan Wu^{1,2,3} · Shutian Zhang^{1,2,3}

Table 2 Comparison of HREM, esophageal width, and Eckardt score between PD and POEM

	PD	POEM	<i>P</i>
Subjects	40	32	
Pretreatment			
LESP, (mmHg)	30.4 ± 15.0	28.0 ± 10.9	0.676
4-s IRP, (mmHg)	23.2 ± 10.9	20.9 ± 7.0	0.233
Esophageal width, (cm)	4.7 ± 1.1	4.4 ± 1.0	0.817
Total Eckardt score	6.15 ± 2.15	6.94 ± 2.14	0.119
Posttreatment			
LESP, (mmHg)	12.6 ± 9.3	12.6 ± 6.5	0.15
4-s IRP, (mmHg)	7.3 ± 5.5	7.0 ± 3.5	0.19
Esophageal width, (cm)	3.2 ± 0.9	3.0 ± 0.8	0.349
Total Eckardt score	1.7 ± 1.5	1.1 ± 1.0	0.042
Difference in the pre- and posttreatment parameters			
LESP, (mmHg) (%)	58 ± 23	51 ± 27	0.164
4-s IRP, (mmHg) (%)	65 ± 23	63 ± 19	0.318
Esophageal width, (cm)	1.5 ± 0.5	1.4 ± 0.5	0.425
Total Eckardt score	4.5 ± 2.4	5.9 ± 2.0	0.009



Differenza statisticamente significativa per il tipo III (p=0.038)

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Complicanze

	PD	POEM	<i>P</i>
Procedure time, (min)	20 (13–30)	72.5 (40–180)	<0.001
Complications			
Esophageal perforation, <i>n</i>	0	0	
Subcutaneous emphysema, <i>n</i> (%)	0	4 (12.5%)	
Gastroesophageal reflux, <i>n</i> (%)	4 (10%)	6 (18.8%)	0.286
Hospital stay, (day)	3 (3–5)	8 (6–10)	<0.001

Efficacia della POEM

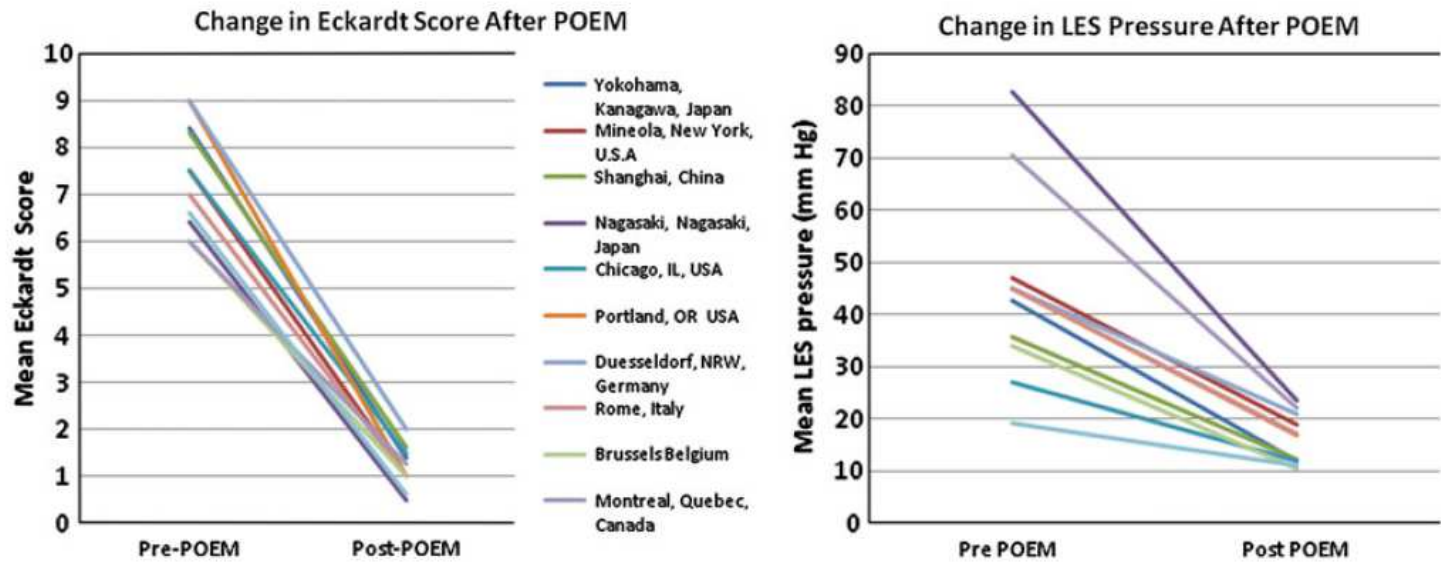


Fig. 8 Clinical and manometric response after POEM (overall clinical success 98 % (90–100 %))

Risultati della POEM

- Successo a breve termine (6 mesi): 91-99%
- Successo a lungo termine (3 anni): 88-98%
- Complicanze: 20-46% di GERD

Risultati PD

- Successo a breve termine (6 mesi): 96 %
- Successo a lungo termine (9 anni): 50%
- Complicanze: 2-5.4% perforazione

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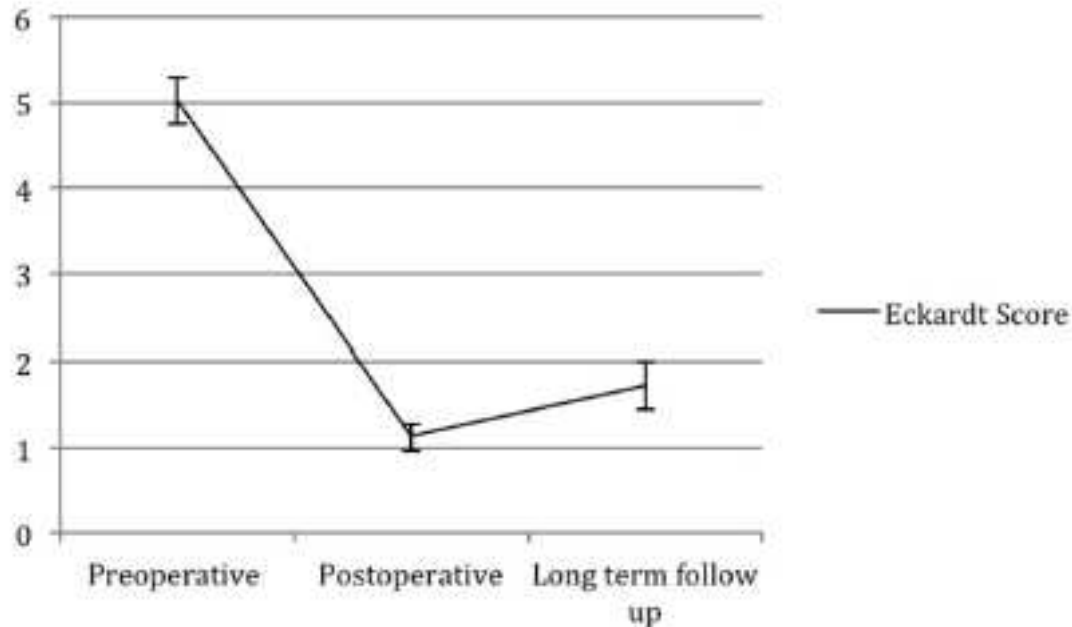
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Long-term outcomes following POEM for non-achalasia motility disorders of the esophagus

Filippo Filicori^{1,3} · Christy M. Dunst^{1,3} · Ahmed Sharata^{1,3} · Walaa F. Abdelmoaty^{1,3} · Ahmed M. Zihni^{1,3} · Kevin M. Reavis^{1,3} · Steven R. Demeester^{1,3} · Lee L. Swanström^{1,2,3}

Received: 24 April 2018 / Accepted: 5 September 2018
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Studio retrospettivo su 40 pz



Situazioni particolari per POEM

- Ritrattamento in pz già sottoposti a LHM con insuccesso clinico
- Acalasia con esofago “sigmoid-type”
- POEM efficace anche nei disordini motori esofagei (spasmo esofageo diffuso o esofago a “cavaturacciolo”)
- Migliori risultati rispetto alla LHM nell’acalasia tipo III

Conclusioni

- La POEM è un tecnica endoscopica efficace e sicura per il trattamento dell'acalasia e di vari disturbi motori esofagei
- Gli studi dimostrano un'efficacia sovrapponibile alla PD e all LHM
- Il reflusso gastro-esofageo è una complicanza frequente e rilevante di questa tecnica
- L'utilizzo di questa metodica va commisurato alla casistica e all'esperienza di ogni centro endoscopico