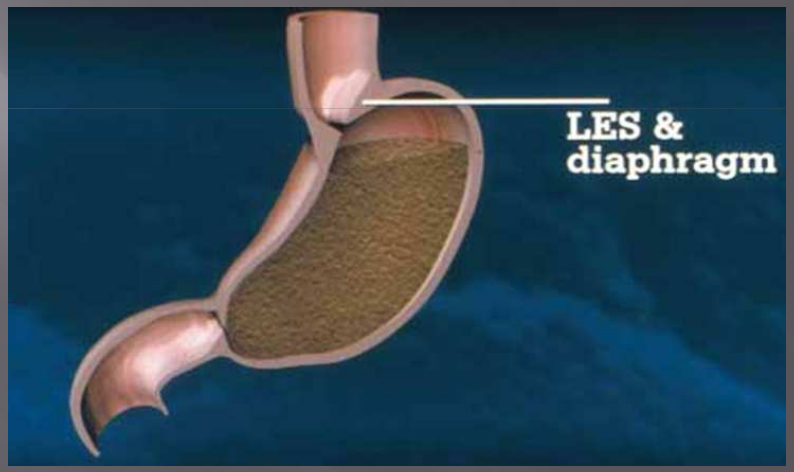
ΓΑΣΤΡΟΟΙΣΟΦΑΓΙΚΗ ΠΑΛΙΝΔΡΟΜΗΣΗ ΚΑΙ ΔΙΑΦΡΑΓΜΑΤΟΚΗΛΗ ΣΤΟΥΣ ΗΛΙΚΙΩΜΕΝΟΥΣ

Δημήτρης Θεοδώρου
Χειρουργός
Μονάδα Χειρουργικής Ανωτέρου Πεπτικού
Ιπποκράτειο ΓΝΑ

Γαστροοισοφαγική Παλινδρόμηση

- Συμπτώματα ή βλεννογονική βλάβη που προκαλούνται από την παλινδρόμηση γαστρικού περιεχομένου στον οισοφάγο



Ανατομία

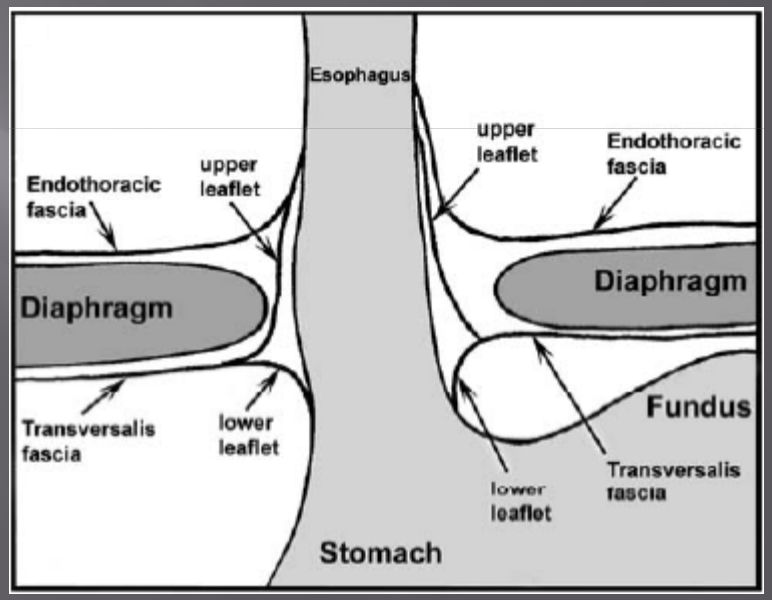
- **Ζώνη Αυξημένης Πίεσης Κατώτερου Οισοφάγου:**

  Φρενοοισοφαγικός Σύνδεσμος

  Ενδοκοιλιακό Τμήμα

  Κυκλοτερής Μυϊκή στιβάδα Οισοφάγου

  Μυϊκός Στομάχου



Συμπτώματα

- **Τυπικά**
  Καύσος
  Αναγωγές
- **Άτυπα**
  Πόνος
  Δυσπεπτικά
  Αναπνευστικά

Clinical Features of Reflux Esophagitis in Older People: A Study of 840 Consecutive Patients

Alberto Pilotto, MD,[*†] *Marilisa Franceschi, MD,*[*§] *Gioacchino Leandro, MD,*[‖] *Carlo Scarcelli, MD,*[*] *Luigi P. D'Ambrosio, MD,*[*] *Davide Seripa, PhD,*[†] *Francesco Perri, MD,*[‡] *Valeria Niro, MD,*[*] *Francesco Paris, MD,*[*] *Angelo Andriulli, MD,*[‡] *and Francesco Di Mario, MD*[§]

JAGS 54:1537–1542, 2006

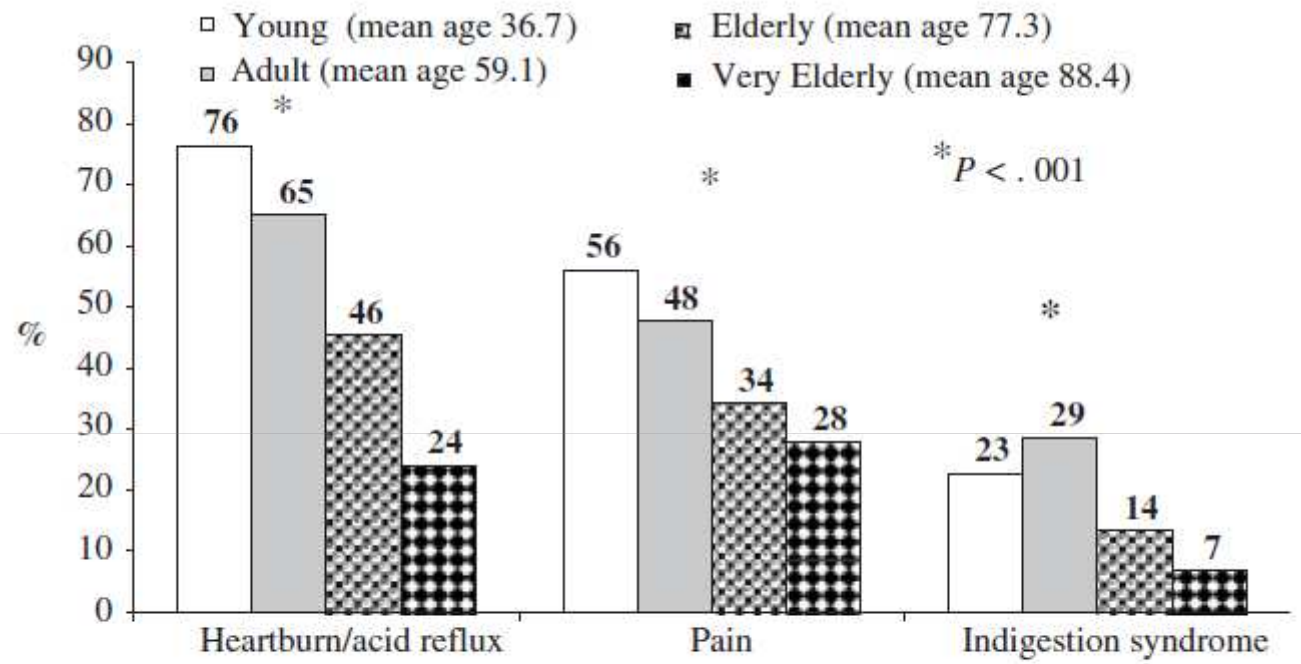


Figure 1. Prevalence of typical symptoms in 840 subjects with reflux esophagitis divided according to age.

JAGS 54:1537–1542, 2006

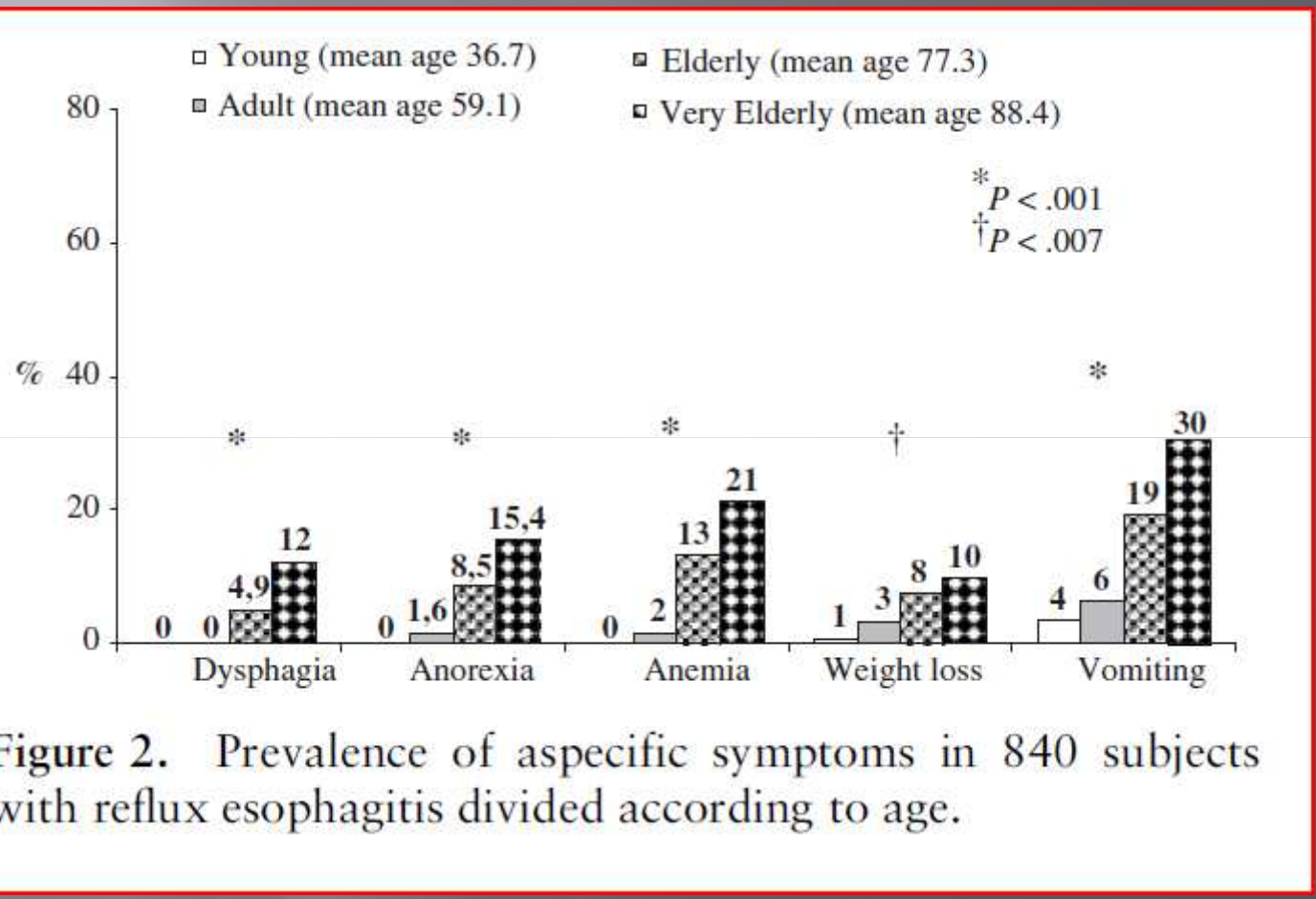


Figure 2. Prevalence of aspecific symptoms in 840 subjects with reflux esophagitis divided according to age.

JAGS 54:1537–1542, 2006

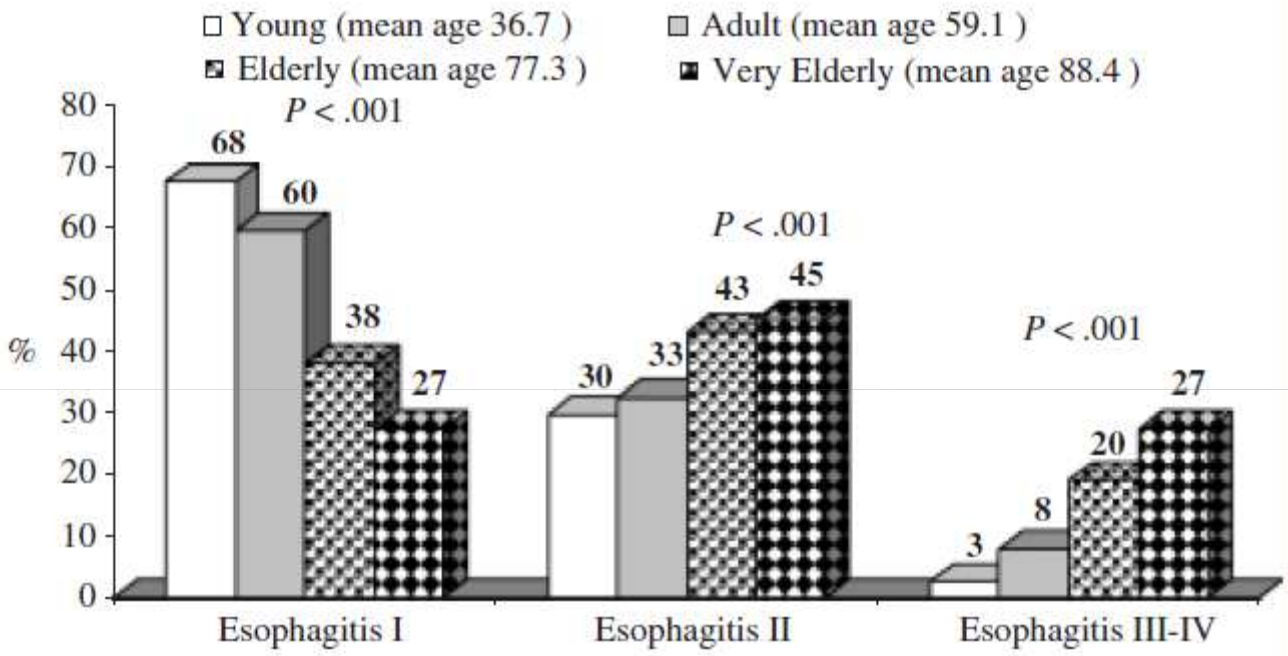


Figure 3. Grades of severity of reflux esophagitis in 840 patients divided according to age.

JAGS 54:1537–1542, 2006

Diagnosis	Young (18–49)	Adult (50–69)	Elderly (70–84)	Very elderly (85–101)	*P*-value
Hiatus hernia, n/N (%)	54/114 (47.4)	67/126 (53.2)	242/425 (56.9)	111/175 (63.4)	.05*
Size of hiatus hernia (cm)	2.6 ± 0.7	3.0 ± 1.3	3.4 ± 1.5	3.8 ± 1.6	<.001†
H. pylori infection	31/114 (27.2)[a]	57/120 (47.5)[b]	151/338 (44.7)[c]	39/113 (34.5)	a vs b: .002‡ a vs c: .002‡
Antrum gastric atrophy	9/114 (7.9)	9/120 (7.5)	57/338 (16.8)	13/113 (11.5)	.049*
Corpus gastric atrophy	3/109 (2.7)	2/111 (1.8)	25/301 (8.3)	6/97 (6.2)	.04*
Barrett's esophagus	0/114 (0)	3/126 (2.3)	13/425 (3.05)	5/175 (2.9)	.12*
NSAID/aspirin use	5/114 (4.4)	9/126 (7.1)	47/425 (11.1)	24/175 (13.7)	.004*

JAGS 54:1537–1542, 2006

Διάγνωση

- Βαριούχο γεύμα
- Γαστροσκόπηση
- Μανομετρία
- Πεχαμετρία

REVIEW

THE AMERICAN JOURNAL of MEDICINE®

Review: Treatment of Gastroesophageal Reflux Disease in the Elderly

Choo Hean Poh, MBBS, Tomás Navarro-Rodriguez, MD, PhD, Ronnie Fass, MD

The Neuroenteric Clinical Research Group, Department of Medicine, Section of Gastroenterology, Southern Arizona VA Health Care System, Tucson; University of Arizona Health Sciences Center, Tucson.

The American Journal of Medicine (2010) 123, 496-501

Impede Esophageal Function	Retard Gastric Emptying	Direct Esophageal Mucosal Injury
Calcium channel blockers	Calcium channel blockers	Nonsteroidal anti-inflammatory drugs (NSAIDs)
Theophylline	Narcotics	Aspirin
Nitrates	Anticholinergics	Tetracycline
Diazepam	Clonidine	Trimethoprim-sulfamethoxazole
Narcotics	Dopamine agents	Antiretroviral agents
Beta-agonists	Lithium	Ascorbic acid
Anticholinergics	Nicotine	Ferrous sulfate
Progesterone	Progesterone	Phenytoin
		Potassium chloride
		Propranolol
		Quinidine
		Theophylline
		Alendronate, pamidronate

The American Journal of Medicine (2010) 123, 496-501

Table 3 Lifestyle Modifications for the Treatment of GERD in the Elderly

Weight reduction
Elevate the head of the bed
Avoid drinking alcohol or smoking
Avoid eating spicy food, coffee, and large fatty meals
Avoid carbonated beverages
Avoid assuming the supine position up to 3 hours after a meal
Avoid tight-fitting garments
Avoid medications that exacerbate GERD symptoms
Avoid medications that can cause pill-induced esophagitis such as ascorbic acid, potassium, iron supplement, tetracycline, bisphosphonates, and others

GERD = gastroesophageal reflux disease.

The American Journal of Medicine (2010) 123, 496-501

Αντιόξινα

- Ταχεία
- Μικρής διάρκειας
- Ηλεκτρολυτικές διαταραχές
- Διάρροια
- Δυσκοιλιότητα

H2 Αναστολείς

- Μέτρια ικανότητα επούλωσης οισοφαγίτιδας
- Νοητικές διαταραχές ειδικά με νεφρική ή ηπατική δυσλειτουργία
- Αλληλεπίδραση P450, κουμαρινικά, θεοφυλλίνη, φαινυτοίνη

Αναστολείς Αντλίας Πρωτονίου

- Μεγάλη αποτελεσματικότητα ρύθμισης συμπτωμάτων αλλά και επούλωσης βλαβών
- Υποτροπή σε 90% μέσα σε 9-12 μήνες
- Αλληλεπίδραση P450, κουμαρινικά, θεοφυλλίνη, φαινυτοίνη
- Επιπλοκές μακροχρόνιας χρήσης

Long-term Proton Pump Inhibitor Therapy and Risk of Hip Fracture

Conclusion Long-term PPI therapy, particularly at high doses, is associated with an increased risk of hip fracture.

Table 2. Risk of Hip Fracture Associated With Increasing Cumulative Duration of Proton Pump Inhibitor Therapy

	Cumulative Proton Pump Inhibitor Therapy Duration, y			
	1	2	3	4
OR (95% CI)*				
Crude	1.43 (1.35-1.52)	1.84 (1.67-2.01)	2.10 (1.91-2.35)	2.17 (1.93-2.45)
Adjusted†	1.22 (1.15-1.30)	1.41 (1.28-1.56)	1.54 (1.37-1.73)	1.59 (1.39-1.80)

JAMA. 2006;296:2947-2953

Προοπτικές

Risk of Community-Acquired Pneumonia and Use of Gastric Acid–Suppressive Drugs

Conclusion Current use of gastric acid–suppressive therapy was associated with an increased risk of community-acquired pneumonia.

Table 1. Relative Risks for Community-Acquired Pneumonia by Exposure to Gastric Acid–Suppressive Therapy

			Exposed to Acid-Suppressive Drugs		
	Total	Unexposed	Overall	H_2-Receptor Antagonists	Proton Pump Inhibitors
No. of patients	364 683	345 224	19 459*	10 177	12 337
Person-years	977 893	970 331	7562*	2351	5191
No. of cases of pneumonia	5551	5366	185	54	131
Unadjusted relative risk (95% CI)		1.00	4.47 (3.82-5.12)	4.24 (3.18-5.43)	4.63 (3.84-5.43)

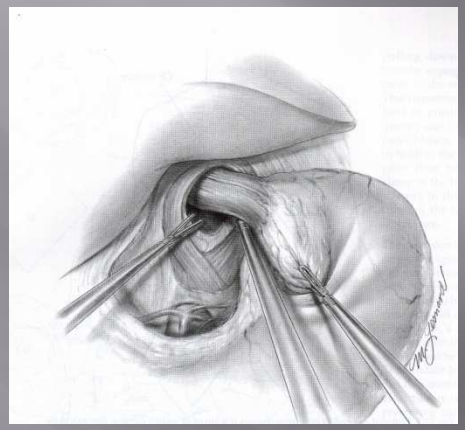
JAMA. 2004;292:1955-1960

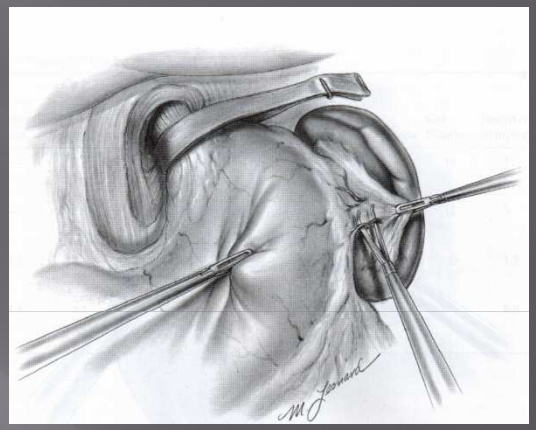
Ενδείξεις θολοπλαστικής

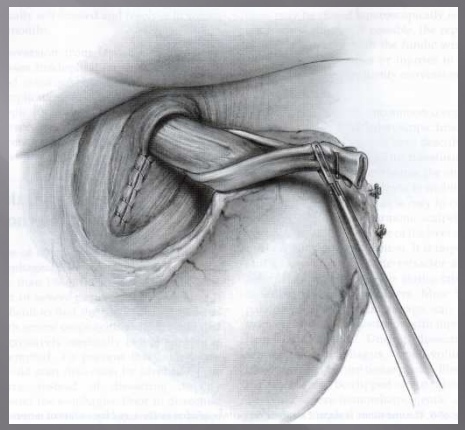
- Αποτυχία PPI
- Επιλογή ασθενούς παρά την επιτυχία PPI
- Επιπλοκές ΓΟΠ (Barrett, βαριά οισοφαγίτιδα)
- Διαφραγματοκήλη
- Άτυπα συμπτώματα με θετική πεχαμετρία

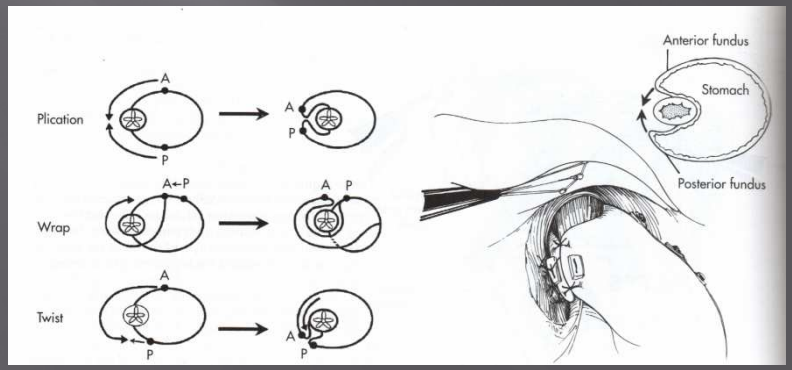
SAGES 2006

Τεχνικά Ζητήματα









Μακροχρόνια Αποτελέσματα

Laparoscopic Nissen Fundoplication: Clinical Outcomes at 10 Years

Jamie J Kelly, BM, FRCS, David I Watson, MD, FRACS, Kin Fah Chin, BM, FRCS,
Peter G Devitt, MS, FRCS, FRACS, Philip A Game, MBBS, FRCS, FRACS, Glyn G Jamieson, MS, FRACS

BACKGROUND: Laparoscopic Nissen fundoplication is now the most common operative procedure for treatment of gastroesophageal reflux disease, although longterm clinical outcomes after this procedure remain uncertain.

STUDY DESIGN: Outcomes for 250 patients who underwent Nissen (total) fundoplication at least 10 years ago (September 1991 to August 1995) were determined prospectively using a structured questionnaire that evaluated clinical symptom scores for heartburn, dysphagia, and satisfaction with clinical outcomes.

RESULTS: Clinical followup data for at least 10 years (120 to 167 months) after operation were available for 226 patients, an additional 21 patients had died, making outcomes for 247 patients (99%). Of the three (1%) remaining patients, one was lost to followup and dementia developed in two. One hundred eighty-seven (83%) patients were highly satisfied with the clinical outcomes. One hundred eighty-nine (84%) had good or excellent control of heartburn. Symptom scores for heartburn, dysphagia, and overall satisfaction were unchanged from 5-year followup data. Forty-two (17%) patients underwent revision operations, 28 (22%) were in the first 125 patients and 14 (11%) in the subsequent 125 patients. Antireflux medication use increased gradually, resulting in 47 (21%) patients using medication at 10 years. Of 21 deaths, 1 was postoperative and the remaining 20 were similar to that predicted for a matched population. A high preoperative heartburn score correlated with high patient satisfaction and lower dysphagia score at 10 or more years ($p = 0.038$ and $p = 0.041$, respectively).

CONCLUSIONS: Laparoscopic Nissen fundoplication is an effective longterm treatment for gastroesophageal reflux disease. (J Am Coll Surg 2007;205:570–575. © 2007 by the American College of Surgeons)

Laparoscopic antireflux surgery in the elderly

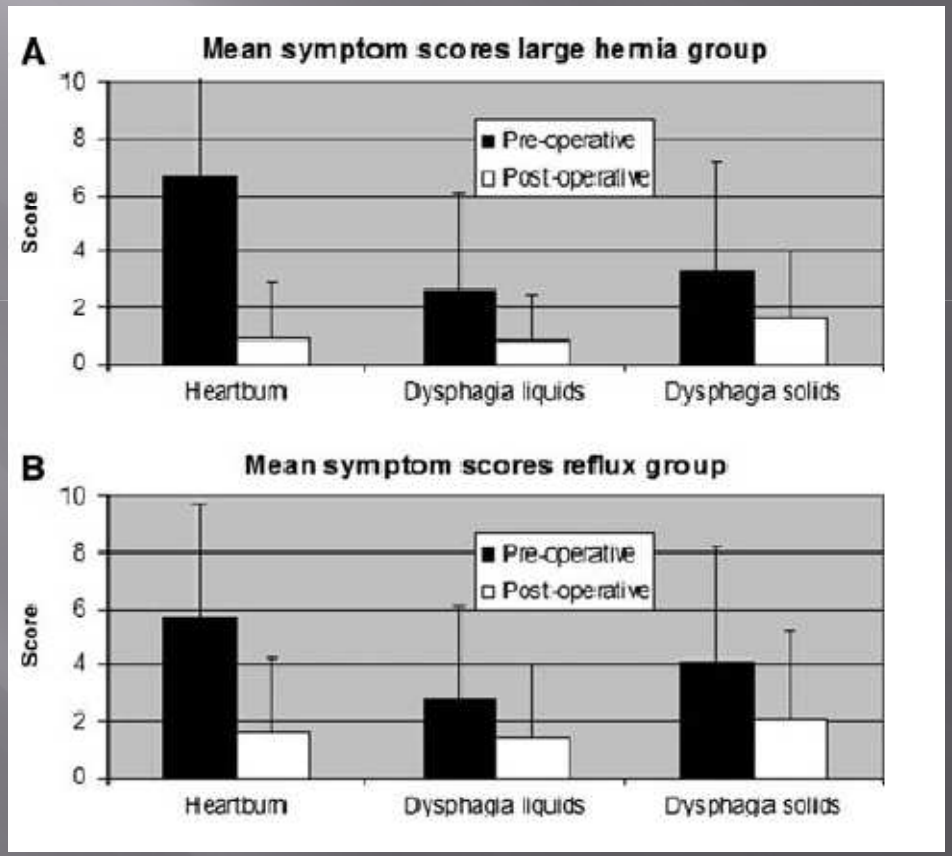
Brechtje A. Grotenhuis · Bas P. L. Wijnhoven · Justin R. Bessell · David I. Watson

	Total group ($N = 210$)	Large paraesophageal hernia group ($N = 129$)	Gastroesophageal reflux group ($N = 81$)	p value (hernia vs. reflux)
Age	76.6 ± 5.2	78.4 ± 5.4	73.7 ± 3.2	<0.01
Sex				
Female	140 (67%)	90 (70%)	50 (62%)	0.20
Male	70 (33%)	39 (30%)	31 (38%)	
Symptom scores				
Heartburn	6.1 ± 4.0	5.7 ± 4.1	6.6 ± 3.8	0.17
Dysphagia liquids	2.6 ± 3.5	2.7 ± 3.4	2.6 ± 3.5	0.86
Dysphagia solids	3.8 ± 4.0	4.1 ± 4.1	3.3 ± 3.9	0.19
Respiratory symptoms	44 (21%)	18 (14%)	26 (32%)	<0.01
Endoscopy	160 (78%)	96 (74%)	64 (79%)	0.42
Hiatus hernia	131 (82%)	91 (95%)	40 (49%)	0.00
Esophagitis grade	median = 1	median = 0	median = 2	
Barrett's	19 (9%)	12 (9%)	7 (9%)	0.85
Barium	133 (63%)	100 (78%)	33 (41%)	<0.01
Hiatus hernia	122 (92%)	99 (99%)	23 (70%)	<0.01
Manometry	123 (59%)	53 (41%)	70 (86%)	<0.01
Mean LES resting pressure	11.3 ± 10.5	15.2 ± 13.0	8.8 ± 7.6	0.01
24-h pH study	46 (22%)	8 (6%)	38 (47%)	<0.01
pH3PTpH4[b]	11.0 ± 7.5	12.6 ± 12.0	10.6 ± 6.4	0.88
pH4 episodes[c]	46 ± 37	68 ± 58	40 ± 28	0.41

Surg Endosc (2008) 22:1807–1812

Laparoscopic antireflux surgery in the elderly

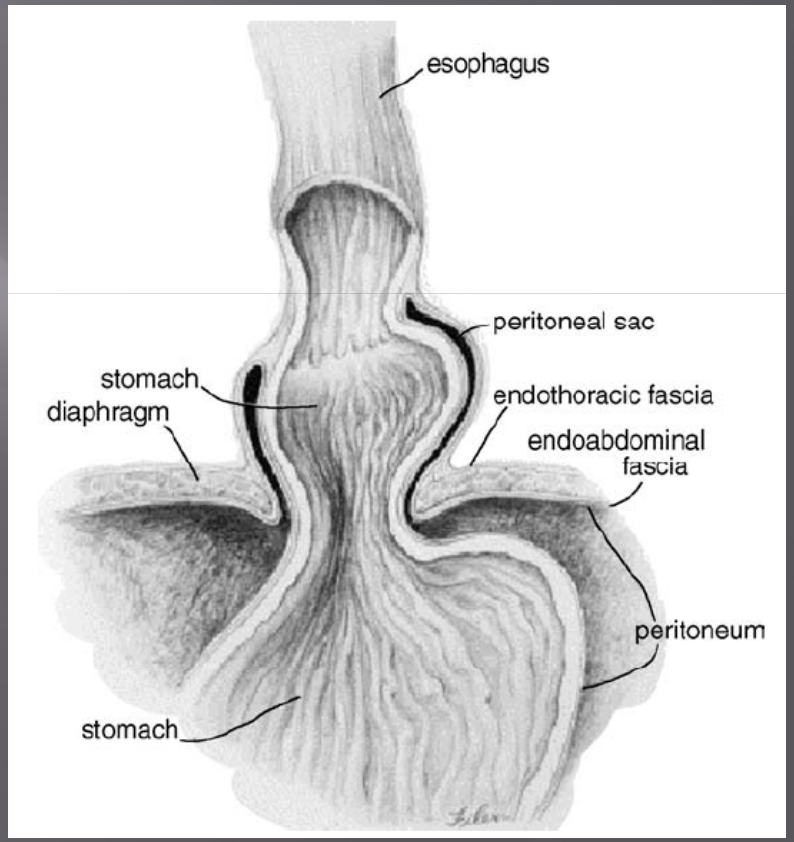
Brechtje A. Grotenhuis · Bas P. L. Wijnhoven ·
Justin R. Bessell · David I. Watson



Surg Endosc (2008) 22:1807–1812

Παραοισοφαγική Κήλη

- Τύπος I



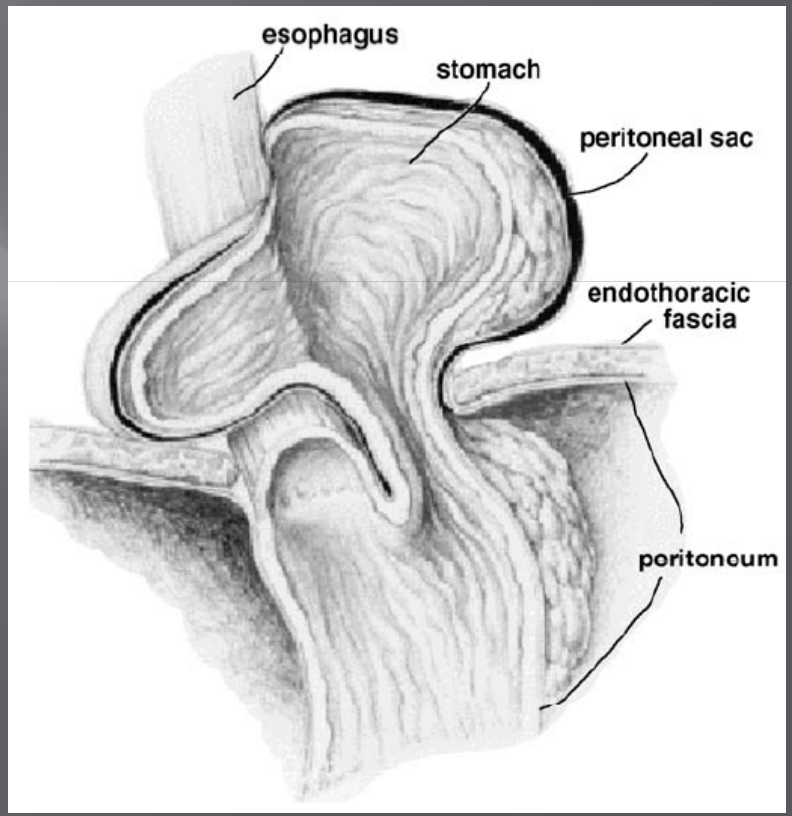
Παραοισοφαγική Κήλη

Τύπος I

- Η πιο συχνή
- Συνύπαρξη ΓΟΠ
- Συμπτώματα ΓΟΠ
- Δυσλειτουργία ΚΟΣ

Παραοισοφαγική Κήλη

Τύπος ΙΙ



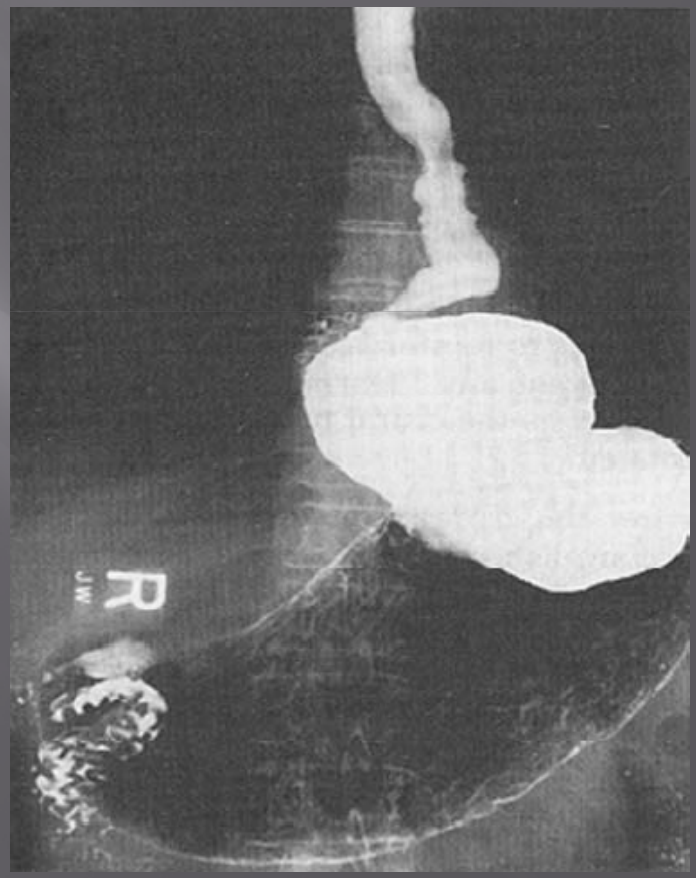
Παραοισοφαγική Κήλη

Τύπος ΙΙ

- Σπάνιες
- Συμπτώματα: μηχανικά, εισρόφηση, αναιμία, πόνος, περίσφιξη
- Αντιμετώπιση άμεση

Παραοισοφαγική Κήλη

Τύπος ΙΙΙ



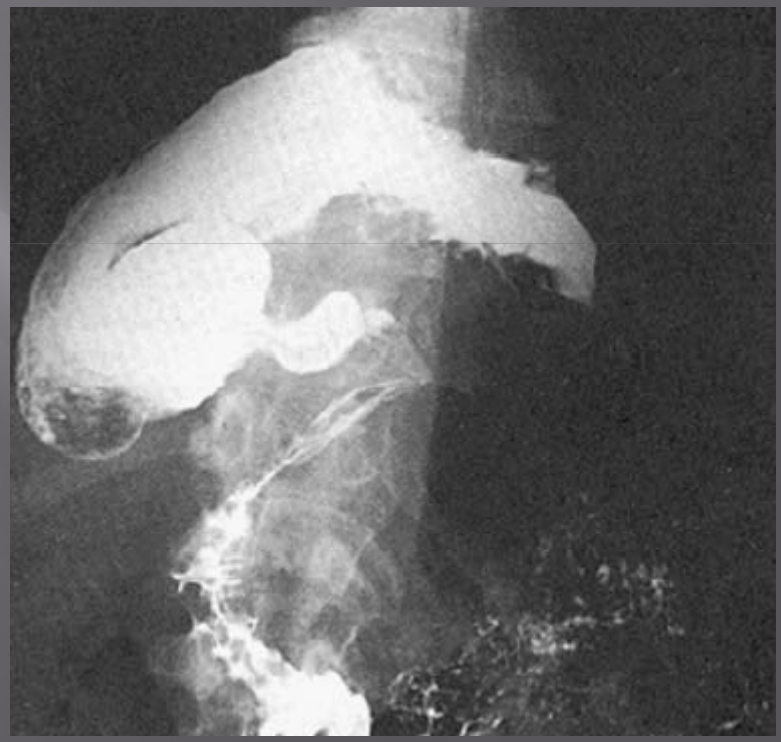
Παραοισοφαγική Κήλη

Τύπος III

- Συχνότερος τύπος αληθούς παραοισοφαγικής
- Συμπτώματα μεικτά
- ΓΟΠ στο ιστορικό

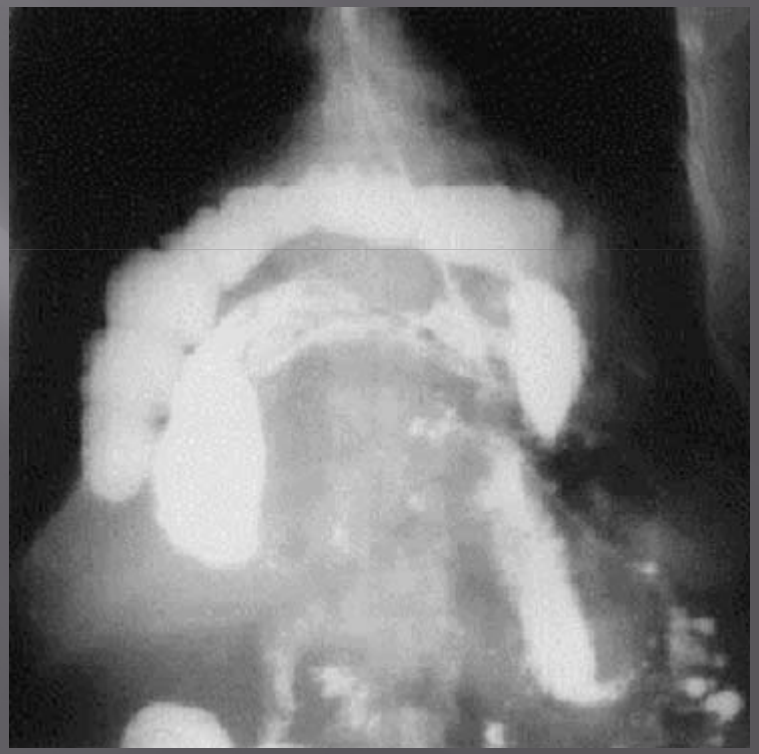
Παραοισοφαγική Κήλη

Τύπος IV



Παραοισοφαγική Κήλη

Τύπος IV



Παραοισοφαγική Κήλη

Παρατρηματική

- Σπανιότατη
- Συγγενής
- Αποφρακτικά

Paraesophageal Hernias: Operation or Observation?

Nicholas Stylopoulos, MD,* G. Scott Gazelle, MD, MPH, PhD,*†‡ and David W. Rattner, MD*†

*From the *Massachusetts General Hospital, †Harvard Medical School, and ‡Harvard School of Public Health, Boston, Massachusetts*

Conclusions

If ELHR is routinely recommended, it would be more beneficial than WW in fewer than one of five patients. WW is a reasonable alternative for the initial management of patients with asymptomatic or minimally symptomatic paraesophageal hernias, and even if an emergency operation is required, the burden of the procedure is not as severe as was thought in the past.

ANNALS OF SURGERY
Vol. 236, No. 4, 492–501

Inpatient Mortality Analysis of Paraesophageal Hernia Repair in Octogenarians

Benjamin K. Poulose · Christine Gosen · Jeffrey M. Marks · Leena Khaitan · Michael J. Rosen · Raymond P. Onders · Joseph A. Trunzo · Jeffrey L. Ponsky

	Odds ratio for death	95% Confidence interval
Gender		
Women	(ref)	(ref)
Men	1.2	0.4–3.4
Hospital bed size		
Small	(ref)	(ref)
Medium	0.3	0.04–1.9
Large	0.8	0.2–3.1
Comorbidities[a]		
Diabetes	0.6	0.1–4.6
CHF	1.7	0.5–5.5
Presentation		
Elective	(ref)	(ref)
Non-elective	7.2	2.1–24.9*

J Gastrointest Surg (2008) 12:1888–1892

Diseases of the Esophagus (2008) **21**, 737–741
DOI: 10.1111/j.1442-2050.2008.00831.x

DISEASES OF THE ESOPHAGUS

Original article

Laparoscopic paraesophageal hernia repair: quality of life outcomes in the elderly

E. J. Hazebroek, S. Gananadha, Y. Koak, H. Berry, S. Leibman, G. S. Smith

Department of Upper Gastrointestinal Surgery, Royal North Shore Hospital, Sydney, NSW, Australia

Symptom	Preoperative $n = 35$	Postoperative $n = 30$	New symptoms $n = 30$
Heartburn	20 (57.1)	6 (16.7)	0 (0)
Regurgitation	17 (48.6)	3 (10)	0 (0)
Chest pain	22 (62.9)	5 (16.7)	2 (6.7)
Respiratory compromise	17 (48.6)	6 (20)	1 (3.3)
Dysphagia	17 (48.6)	7 (23.3)	3 (10)
Anemia	5 (14.3)	1 (3)	0 (0)
Gas bloat	13 (37.1)	6 (20)	6 (20)

Effect of paraesophageal hernia repair on pulmonary function

Significant improvement in spirometry levels were noted in mean

FEV1 (preop, 1.87 liters; postop, 2.17 liters; percent improvement, 16%), $p < 0.0001$

FVC (preop, 2.52 liters; postop, 2.89 liters; percent improvement, 14.7%), $p < 0.0001$

predicted FEV1 (preop, 75.8%; postop, 88.6%), $p < 0.0001$

Ann Thorac Surg. 2002 Aug;74(2):333-7

Paraesophageal Hernias: Operation or Observation?

Nicholas Stylopoulos, MD,* G. Scott Gazelle, MD, MPH, PhD,*†‡ and David W. Rattner, MD*†

*From the *Massachusetts General Hospital, †Harvard Medical School, and ‡Harvard School of Public Health, Boston, Massachusetts*

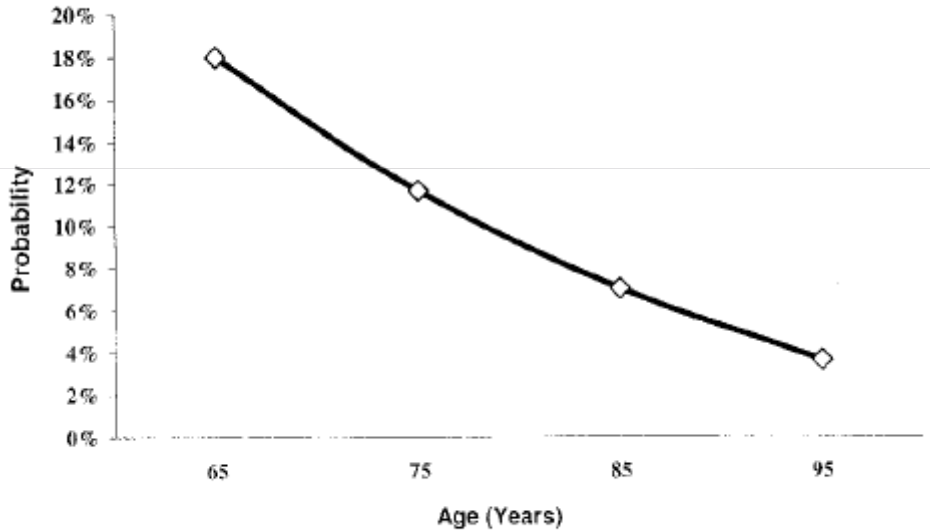


Figure 3. Lifetime risk of developing acute symptoms requiring emergency surgery. The risk decreases significantly as the age of the patient increases.

ANNALS OF SURGERY
Vol. 236, No. 4, 492–501

Συμπεράσματα

- Η ΓΟΠ εμφανίζει άτυπη συμπτωματολογία
- Η κύρια θεραπεία είναι φαρμακευτική
- Η θολοπλαστική πρέπει να αφορά κυρίως ασθενείς με αναγωγές και πνευμονική συμπτωματολογία

Συμπεράσματα

- Η αληθής παραοισοφαγική διαφραγματοκήλη (τύπου ΙΙ) είναι η μόνη απόλυτη ένδειξη για χειρουργική αντιμετώπιση