



Gruppo Italiano per lo Studio della Morilità dell'Apparato Digerente



GRUPPO VILLA MARIA

CONTROVERSIE IN TEMA DI MANAGEMENT DEL PAZIENTE CON MRGE

IL MANAGEMENT DEL FALLIMENTO DELLA CHIRURGIA

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IL MANAGEMENT DEL FALLIMENTO DELLA CHIRURGIA

- Cause di fallimento:
 - Indicazione errata;
 - Recidiva del reflusso;
 - Recidiva anatomica \pm reflusso.



Velanovich V.

The effect of chronic pain syndromes and psychoemotional disorders on symptomatic and quality-of-life outcomes of antireflux surgery.

J Gastrointest Surg. 2003 Jan;7(1):53-8.

Psychoemotional disorders (PED) and chronic pain syndromes (CPS) patients are generally dissatisfied with antireflux surgery. Although some patients do benefit from surgery, careful patient selection is required.



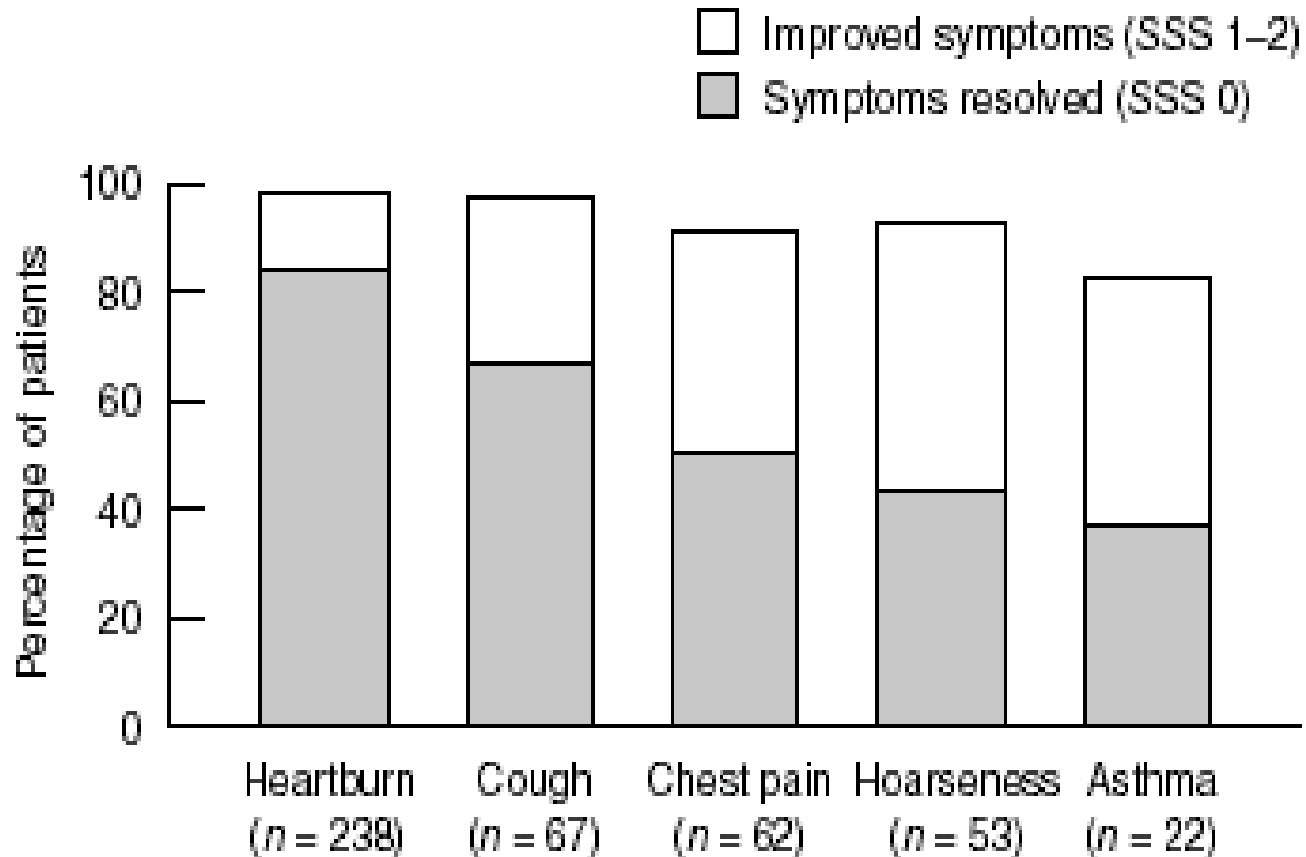


Fig. 2 Symptom response to laparoscopic fundoplication in patients with severe preoperative symptoms (symptom severity score (SSS) 3-4)

Farrell TM et al. Response of atypical symptoms of gastro-oesophageal reflux to antireflux surgery. Br J Surg. 2001; 88 (12): 1649-52.

Complications after anti-reflux surgery

Table 3. Indications for a reoperation due to failed index anti-reflux repair.

Recurrent reflux (%)	67
Dysphagia-stenosis (%)	10
Herniated wrap (%)	14
Severe fundoplication symptoms (%)	3
Miscellaneous (%)	6

Lundell L. Best Pract Res Clin Gastroenterol. 2004; 18 (5): 935-45.



Cause Tecniche:

- **Tecniche di fundusplicatio** 
 - Totale**
 - Parziale**
- **Tecniche di riduzione dell'ernia e plastica del diaframma** 
 - Ernia Paraesofagea**
 - Brachiesofago**



Plastiche antireflusso parziali vs Nissen

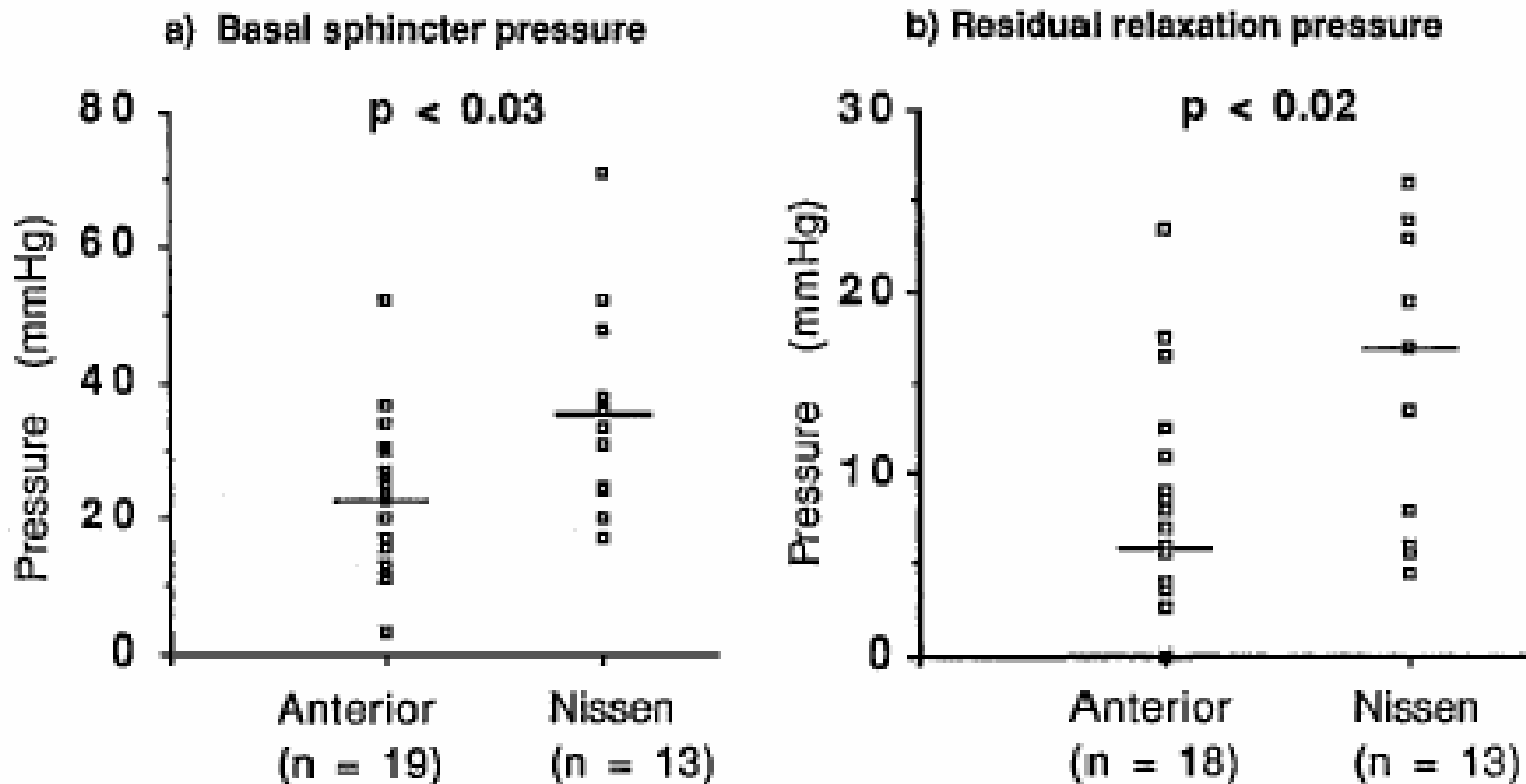


Fig 2. Basal lower esophageal sphincter and nadir pressures following anterior and Nissen fundoplication.

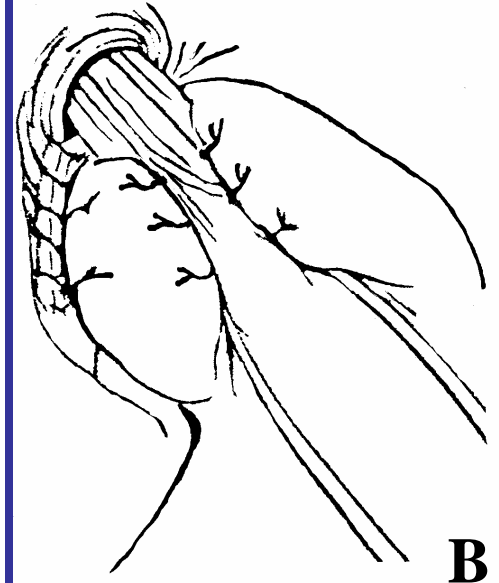
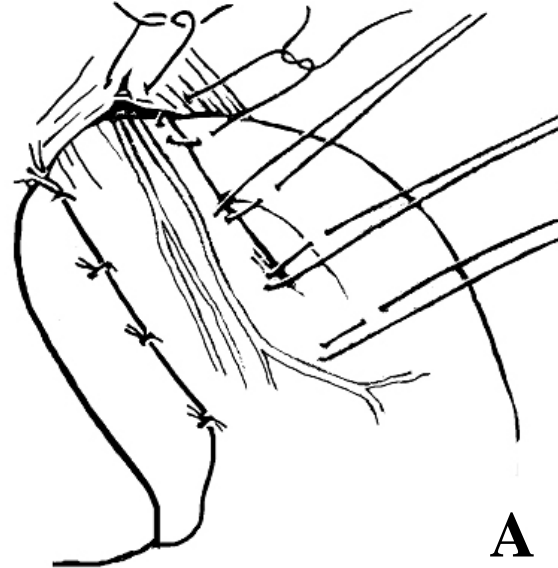
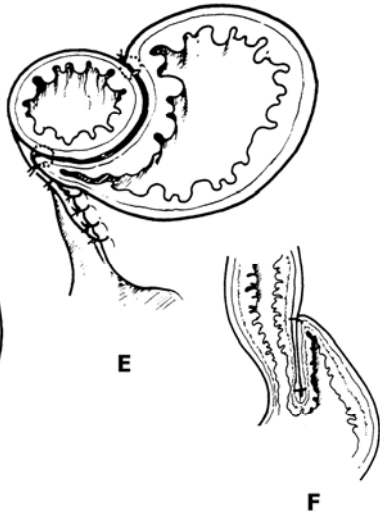
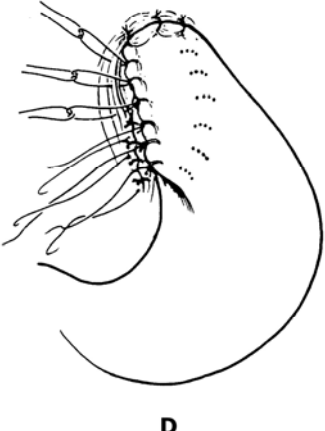
Anderson JA. et al. Concurrent fluoroscopy and manometry reveal differences in laparoscopic Nissen and anterior fundoplication.

Dig Dis Sci. 1998; 43 (4): 847-53.

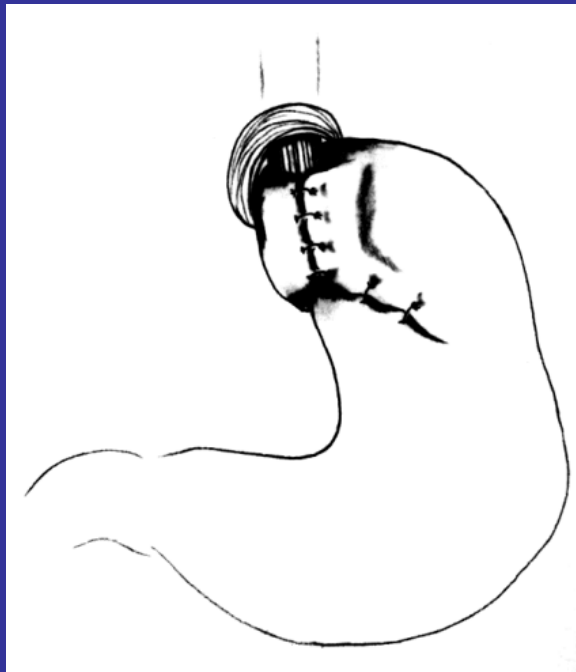


Dor

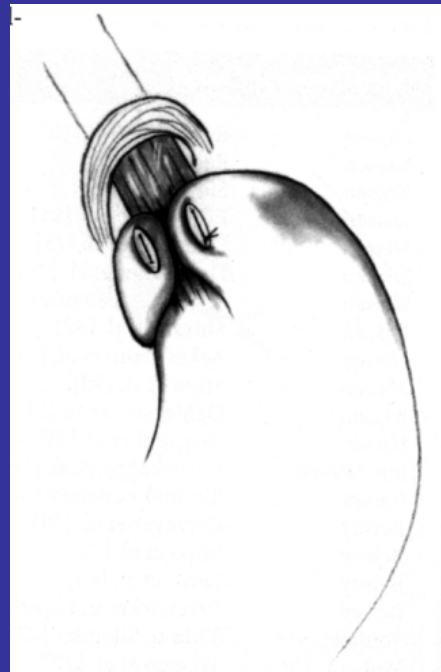
Toupet



**Nissen
-
Rossetti**



**Nissen
-
DeMesster**



Cause Tecniche:

- Tecniche di fundusplicatio 
 - Totale
 - Parziale
- Tecniche di riduzione dell'ernia e plastica del diaframma 
 - Ernia Paraesofagea
 - Brachiesofago



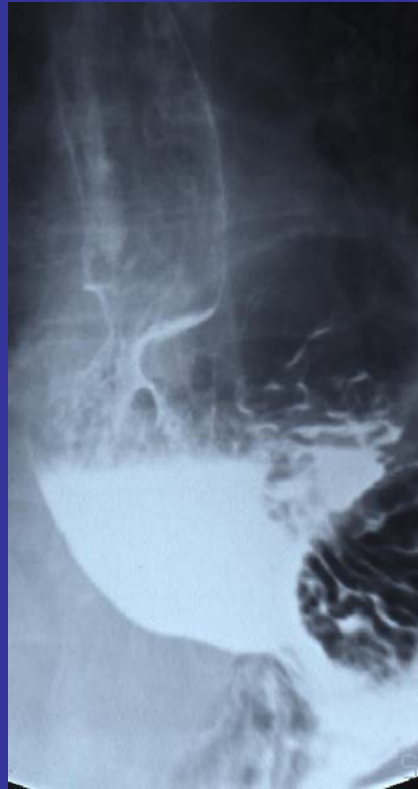
Massive Incarcerated Hiatus Hernia



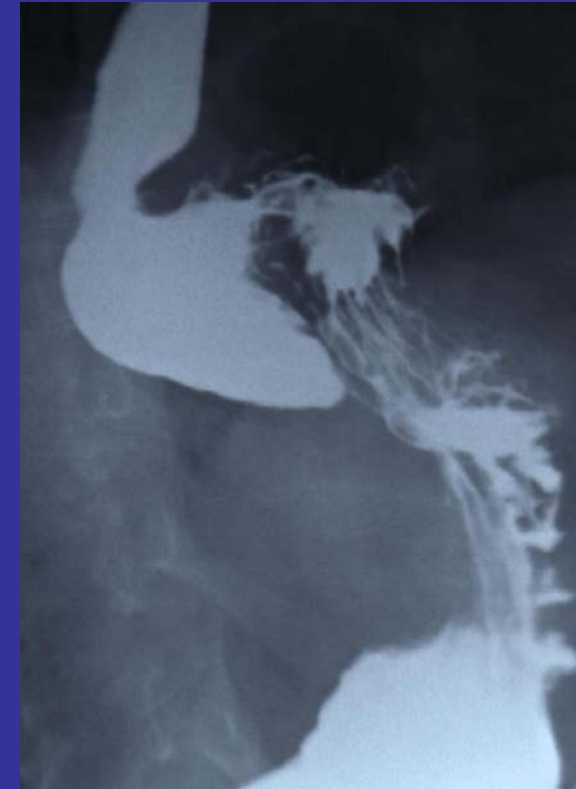
Ortostasi a vuoto



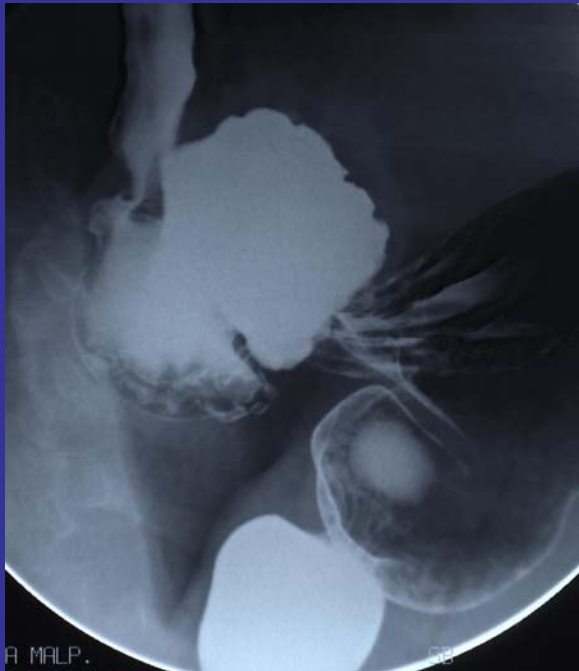
Ortostasi riposo



Ortostasi riposo



Ortostasi obliquo



Supino



Massive Incarcerated Hiatus Hernia

Symptoms and Complications * %

Epigastric Fullness	83-90
Vomiting	74-83
Post-prandial Pain	56-75
Dysphagia	30-38
Anemia	30-38
Heartburn	21-48
Strangulation	10 ?
Obstruction	
Perforation	
Intrathoracic GE Junction	75-90
Short Esophagus	0-85 ?

* Pearson 1971 - Walther 1984 - Eltin 1986 - Postlethwait 1986 - Hiebert 1995 - Maziak 1998 - Geha 2000

Poor Quality of Life



Controversies in paraesophageal hernia repair: a review of literature



Recurrence



159/606 (26.2%) Laparoscopic
53/323 (16.4%) Conventional

Table 4. Recurrence rate following laparoscopic and conventional PHH repair

Reference (year)	Recurrence		Postoperative esophagium	
	Laparoscopic (%)	Conventional (%)	Yes (%)	Not reported
Athanasakis (2001)	0 (0)		100	
Krähenbühl (1998)	0 (0)		100	
Ponsky (2003)	0 (0)		100	
Wu (1999)	8 of 35 (22.9)		92	
Ferri (2004)	7 of 31 (23)	8 of 18 (44)	86	
Targarona (2004)	6 (20)		81	
Hashemi (2000)	9 of 21 (42)	3 of 20 (15)	75	
Wiechmann (2001)	3 (5)		73	
Andujar (2004)	34 of 120 (28)		72	
Perdikis (1997)	7 of 46 (15.2)		71	
Diaz (2003)	21 of 96 (22)		69	
Patel (2004)		19 of 153 (12)	64	
Khaitan (2002)	6 of 25 (24)		60	
Dahlberg (2001)	3 of 22 (13.6)		60	
Mattar (2002)	14 (11.2)		26	
Horgan (1999)	2 (4.9)		20	
Casabella (1996)	0 (0)			x
Gantert (1997)	3 (5.5)			x
Willekes (1997)	0 (0)			x
Pierre (2002)	5 (2.5)			x
Luketich (2000)	1 (1)			x
Huntington (1997)	0 (0)			x
Edye (1998)	7 (14.3)			x
Swanstrom (1999)	4 (8)			x
Trus (1997)	4 of 76 (5.3)			x
Van de Peet (2000)	5 of 22 (22.7)			x
Schauer (1998)	10 of 67 (16)	4 of 25 (16)		x
Altorki (1998)		3 (7.1)		x
Williamson (1993)		13 (11)		x
Geha (2000)		0 (0)		x
Myers (1995)		1 (2.7)		x
Maziak (1998)		2 of 90 (2.2)		x

PHH, paraesophageal hiatal hernia

Ernie gastriche Hiatali Paraesofagee e Miste



Interventi 85	N (%)
Nissen Laparotomica	51 (60%)
Nissen Laparoscopica	9 (10.6%)
Belsey MK4	7 (8.3%)
Collis-Belsey	2 (2.4%)
Collis-Nissen Laparotomica	6 (7%)
Collis-Nissen Laparo-Toracoscopica	10 (11.7%)

Mortalità 1.1%

Morbilità 7.1%

Follow-up mediano 108 mesi

Eccellente	Buono	Discreto	Insufficiente
21.9%	62.1%	10.9%	7.3%

1985



1994

**Barium
swallow:**

**infraabdominal
GEJ**

1999



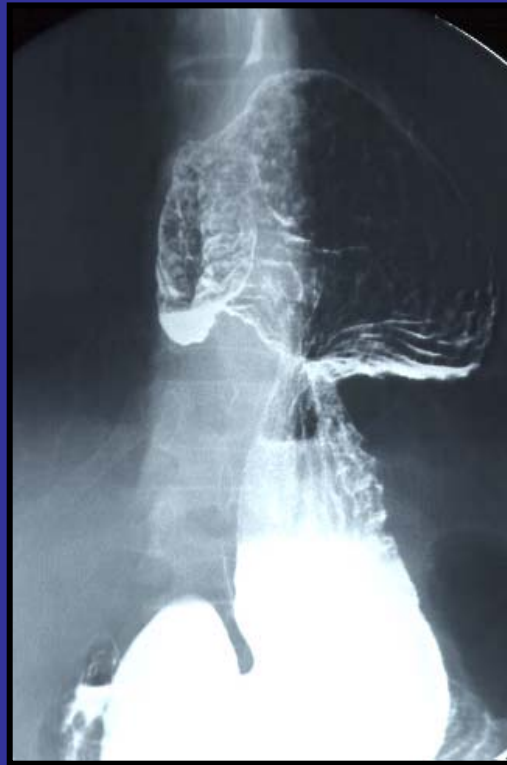
**1985-1990 intermittent therapy with antacid and H₂ blockers
1990-1999 daily therapy with PPI's.**

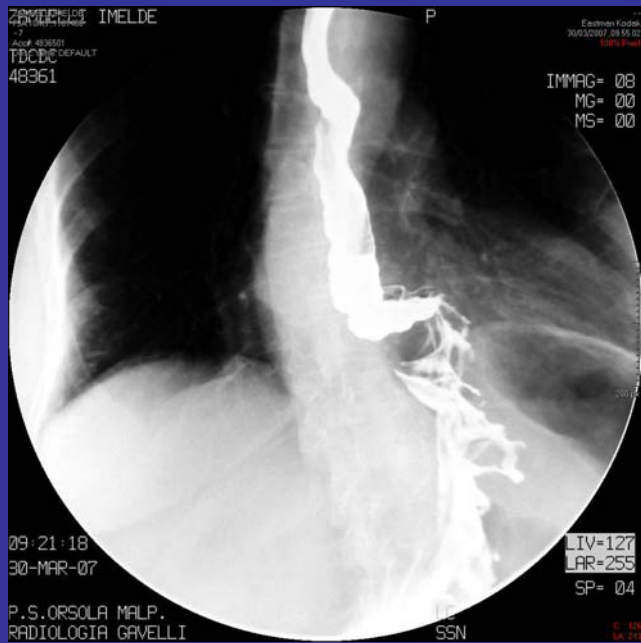


Concentric hiatus hernia

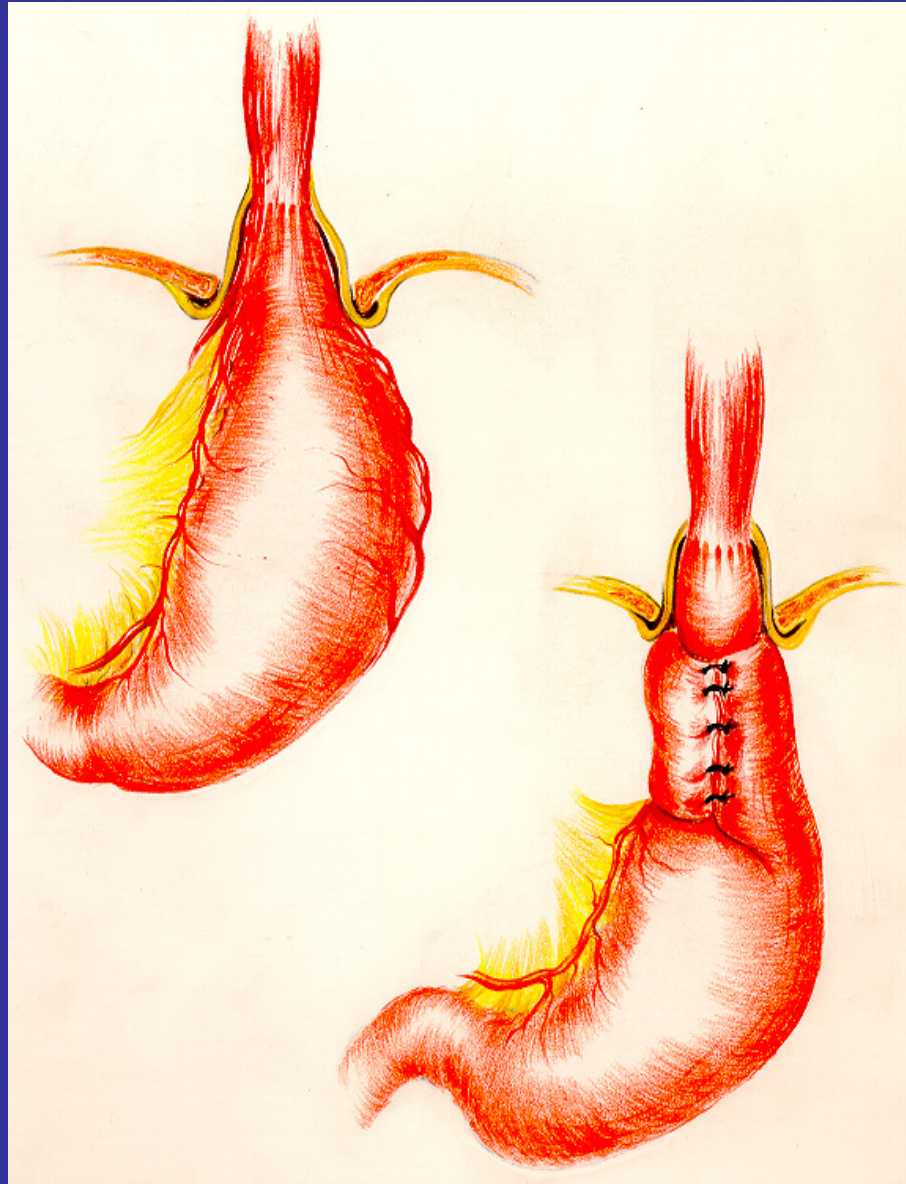


Recurrence of hernia after Nissen fundoplication





Manchonnage sur cône gastrique acc. to Maillet (*Lyon. Chir. 1970*)





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Prof. Di Martino

University of Naples

Prof. Fei

University of Padua

Prof. Ancona

Prof. Zaninotto

University of Pisa

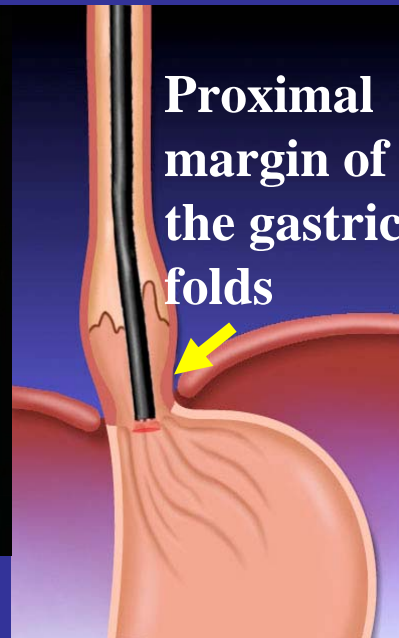
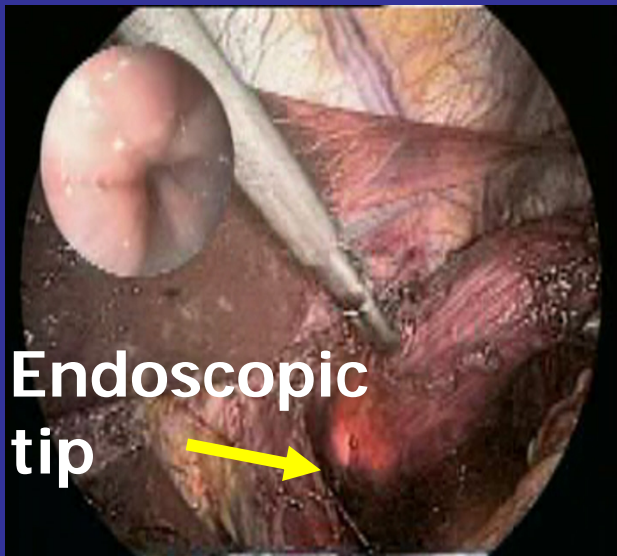
Prof. Rossi

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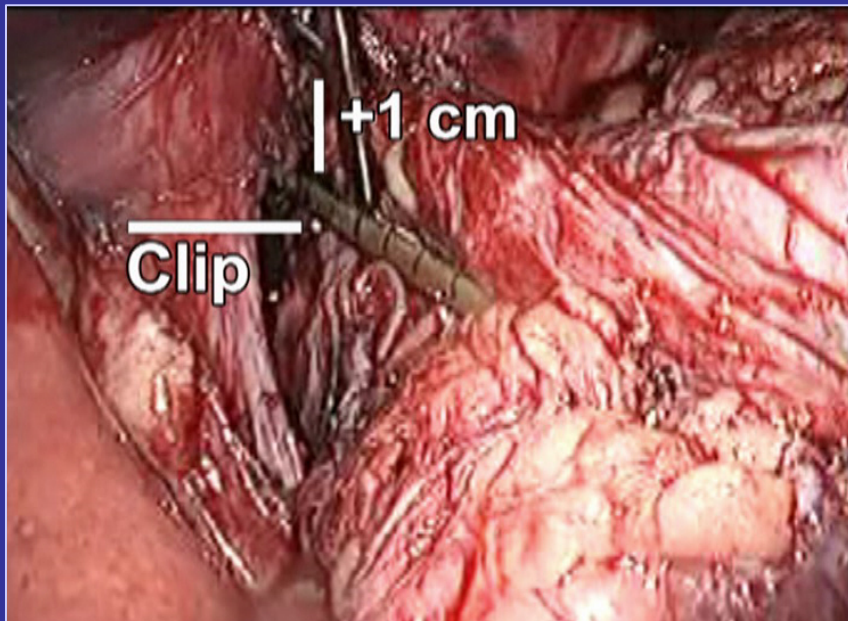
Prof. Morino



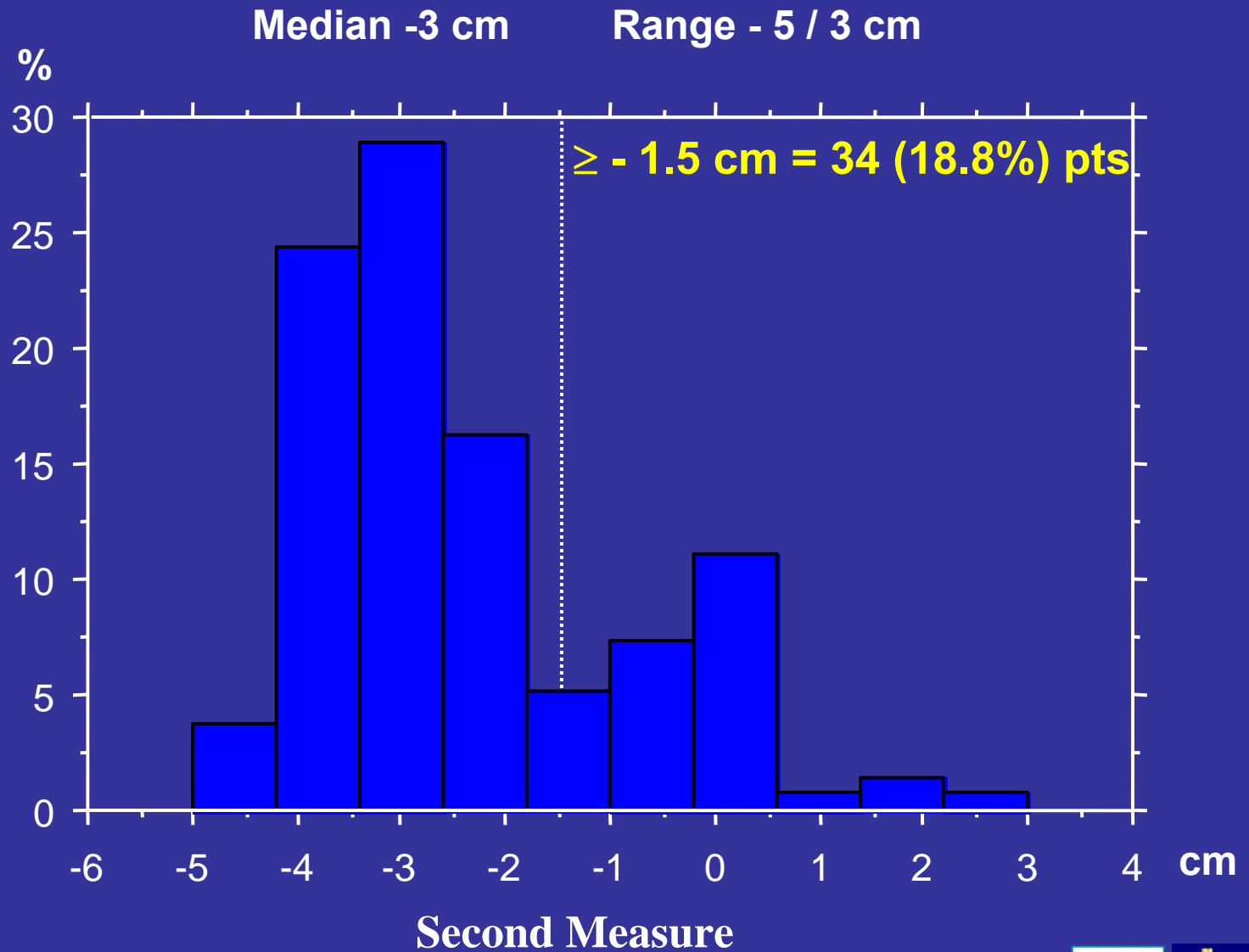
Intraoperative assessment of the G-E-Junction



- The GEJ is localized where the gastric folds disappear into the tubular esophagus. In normal subjects scoped as out-patients, this point is usually located 0.5 cm below a normal z line.



Distance between the marker and the apex of the diaphragm



Conclusions

- **True short esophagus** (abd. Esoph. \leq 1.5 cm aft. mobil.) is present in (18.8 %) of patients undergoing antireflux surgery.
- Radiology, severity and duration of symptoms are predictor of true foreshortening.



Recidiva del reflusso \pm Recidiva anatomica

Trattamento

■ Medico



Reflusso gastro-esofageo patologico
Senza recidiva anatomica
Sintomi atipici

■ Chirurgico

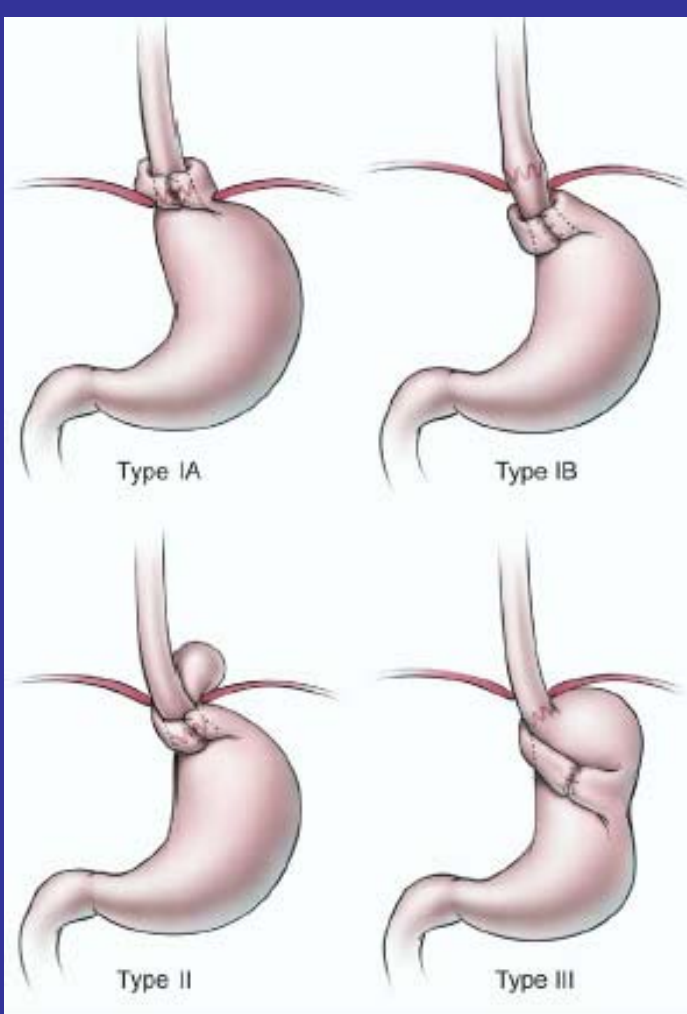


Reflusso gastro-esofageo patologico
resistente a terapia medica

Complic. Anatomiche \pm RGE

Mod. da Spechler SJ. The management of patients who have "failed" antireflux surgery. *Am J Gastroenterol.* 2004 Mar;99(3):552-61.

IL MANAGEMENTO DEL FALLIMENTO DELLA CHIRURGIA



Hatch KF, Daily MF, Christensen BJ, Glasgow RE.
Failed fundoplications.
Am J Surg. 2004 Dec;188(6):786-91

Symptoms by pattern of failure

Symptom	IA	IB	II	III	Other	All
No. (%)	12	9	9	2	7	39
No. with heartburn alone (%)	7 (58)	6 (67)	2 (33)	1 (50)	2 (29)	18 (46)
No. with dysphagia alone	0	1 (11)	3 (22)	0	2 (29)	6 (15)
No. with both heartburn and dysphagia (%)	5 (42)	1 (11)	2 (22)	1 (50)	2 (29)	11 (28)
No. with neither heartburn nor dysphagia (%)	0	1 (11)	2 (22)	0	1 (14)*	4 (10)

* Asymptomatic recurrent large paraesophageal hernia.

LA RECIDIVA DI REFLUSSO

- Nel 5% - 17% recidiva di reflusso di grado patologico con o senza sintomi presenti in maniera continuativa.
- Circa il 5% - 10% di questi pazienti richiede un reintervento.
- La percentuale di successo nei reinterventi varia dal 42% al 94%.
- La mortalità varia da 0 a 5%.
- La morbilità varia da 0 a 45%.

(Little 1986, Pearson 1987, Deschamps 1997; Hunter JG Ann Surg 1996; Graziano K Surg Endosc 2003; Khajanchee YS Arch Surg 2002; Rantanen TK Arch Surg 1999; Eubanks Tret Am J Surg 2000; DePaula 1995, Watson 1999, Pointer 1999, Hatch 2004, Lundell 2004, Smith 2005).



Tailored Surgery in Complicated GERD

- **Esophageal motility impairment**

180° – 270° Fundoplication
360° Floppy Fundoplication

- **Intrathoracic GE junction**

Laparoscopy – Laparo-Thoracoscopy–
Laparotomy - Thoracotomy
Standard –Partial Fundoplication
Collis Nissen - Collis-Belsey
Roux en Y gastric resection

- **Gastric motility impairment**

Roux en Y gastric resection





Author	Year	No pts	Mortality (%)
Little	1986	61	4.9%
Siewert	1989	50	2%
Deschamps	1997	185	0.5%
Hunter	1999	100	1%
Hatch	2004	39	0%
Smith	2005	307	0%

Author	Year	No pts	Morbidity (%)
De Paula	1995	248	2.4%
Stein	1996	71	22.5%
Deschamps	1997	185	25.5%
Watson	1999	27	0%
Rantanen	1999	11	45.5%
Ponitner	1999	30	20%
Papasavas	2004	54	18%
Hatch	2004	39	20 %
Lundell	2004	Review Paper	20-45%
Smith	2005	307	19.2% Open 40.3% Laparoscopic 11.7%

Reinterventi per MRGE 1980-2006

Precedenti Interventi	Interventi	Mortalità Postop.	Morbilità
4 Nissen 2 Dor 1° 1 GR + B II 2°	6 Roux	0	50%
8 Nissen 1 Nissen 2 redo 4 Dor 2 Allison 1 Toupet	16 Nissen	0	33.3%
6 Nissen 2 Collis-Nissen	8 Collis-Belsey	0	50%
1 Lortat-Jacob 3 Nissen 2 Allison	6 Collis-Nissen	0	-
1 Heirowsky 1 Nissen	2 Collis-Dor	0	-
1 Nissen 1 Collis Nissen	2 Plastica dello Hiatus	0	50%
1 Nissen 2redo	1 Roux+Gast Totale	0	-
Totale 41	Totale 41	0	33.3% Maggiori 14.8% Minori 18.5%



Reinterventi per MRGE

1980-2006

Interventi	Risultati				Follow up medio (mesi)
	Eccellente	Buono	Discreto	Insufficiente	
Roux	50%	33.3%	16.7%	-	69.5
Nissen	33.3%	44.4%	22.3%	-	69.3
Collis-Belsey	-	50%	25%	25%	118.2
Collis-Nissen	-	16.7%	50%	33.3%	171.6
Collis-Dor	50% (1)	-	-	50%(1)	117.5
Plastica dello Hiatus	-	50% (1)	50% (1)	-	73.7
Totale (41)	34% (14)	30% (12)	24% (10)	12% (5)	6-280