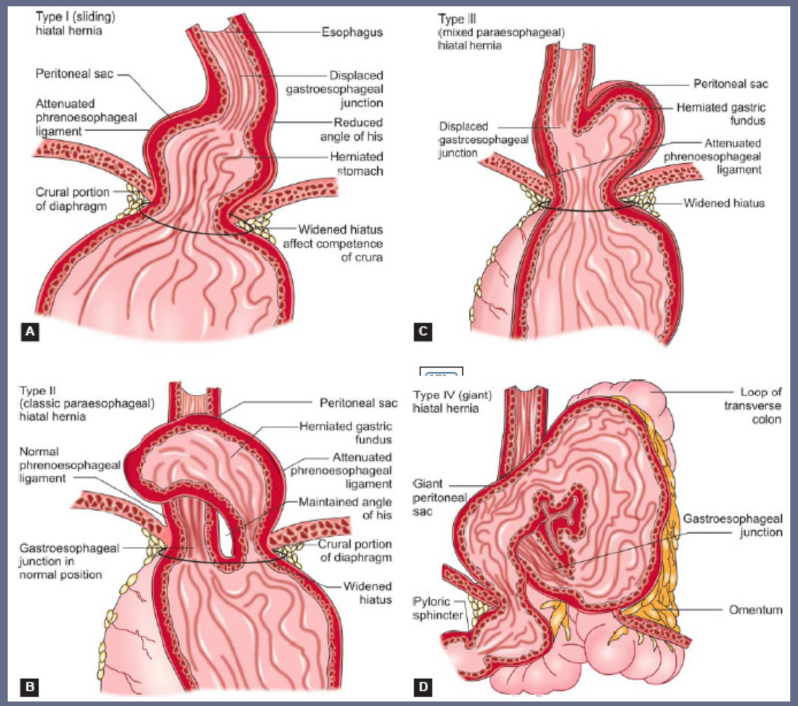
Azienda Ospedaliero Universitaria di Ferrara

Chirurgia Generale I
Direttore: Prof. G. Cavallesco

TRATTAMENTO DELL'ERNIA JATALE GIGANTE

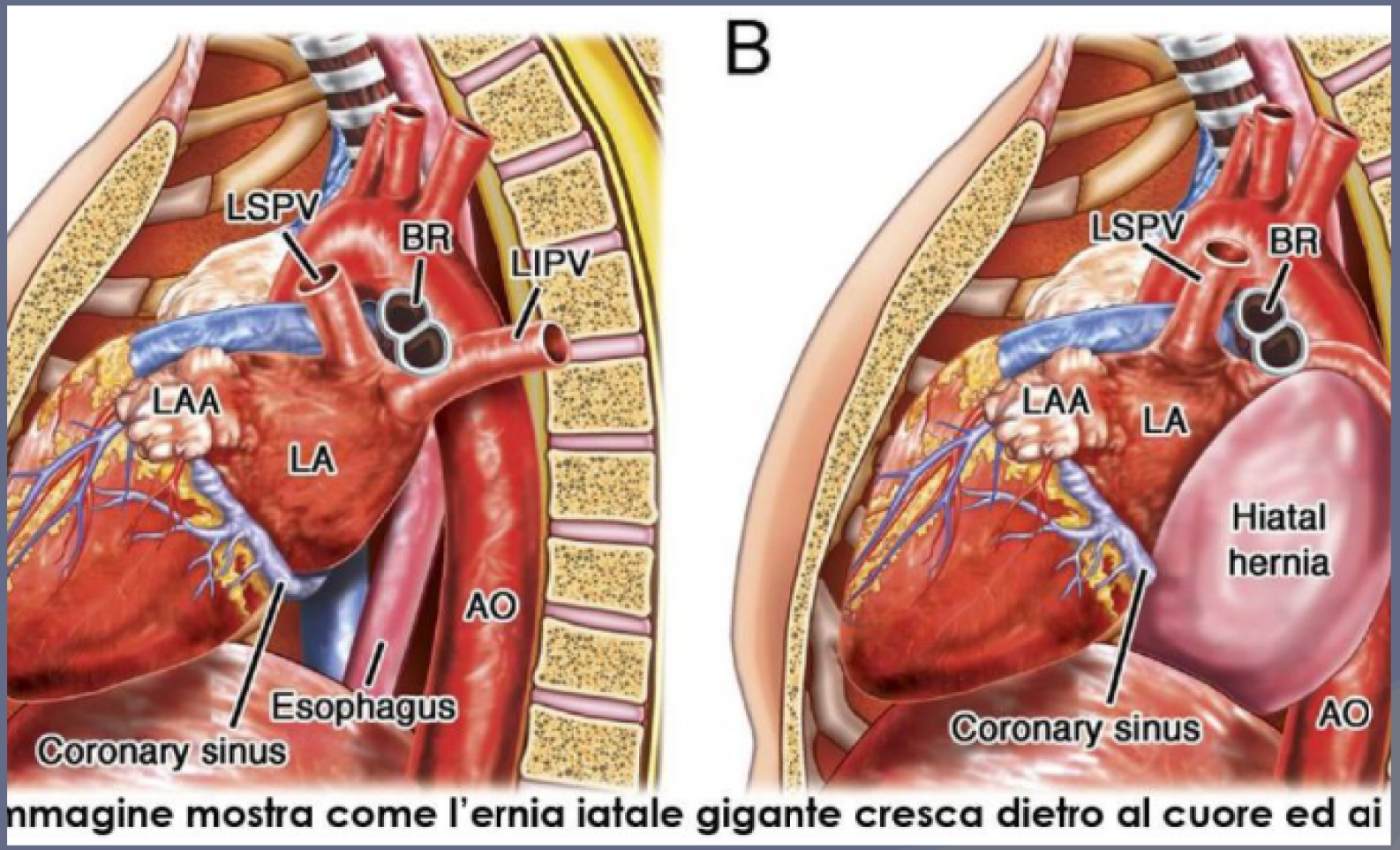
Dott. G. Resta, Dott.ssa S. Giaccari

Definizione



Ernia Jatale Gigante

Tipo IV: risalita dello stomaco in torace attraverso lo jato diaframmatico in associazione ad altri organi addominali



nmagine mostra come l'ernia iatale gigante cresca dietro al cuore ed ai

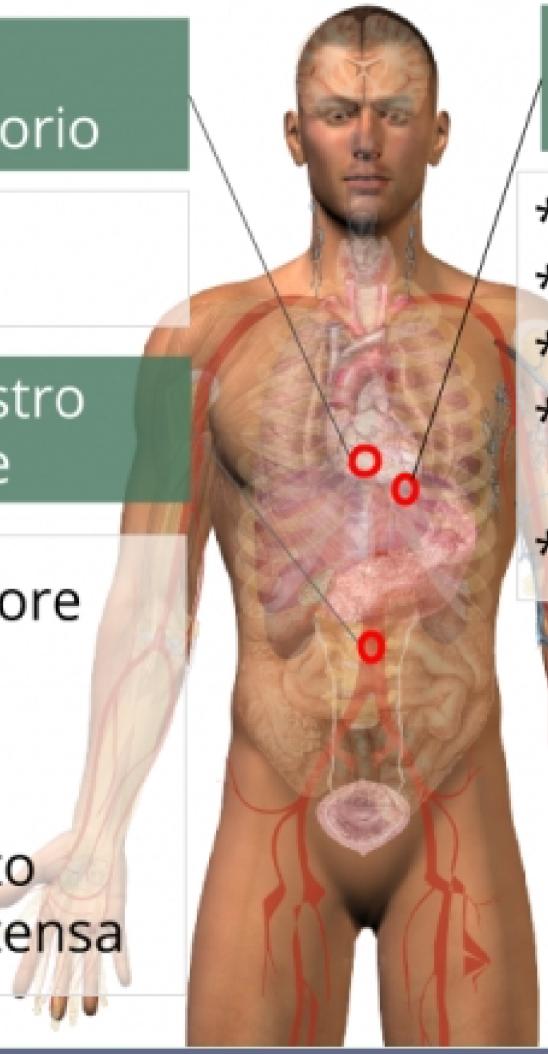
Principali sintomi dell'**ernia iatale**

Apparato cardiocircolatorio

* Extrasistole

Apparato gastro intestinale

* Bruciore e dolore allo stomaco
* Meteorismo
* Eruttazione
* Nausea, vomito
* Salivazione intensa



Apparato respiratorio

* Difficoltà respiratorie
* Asma
* Esofagite
* Bruciore alla faringe ed della trachea
* Stenosi dell'esofago

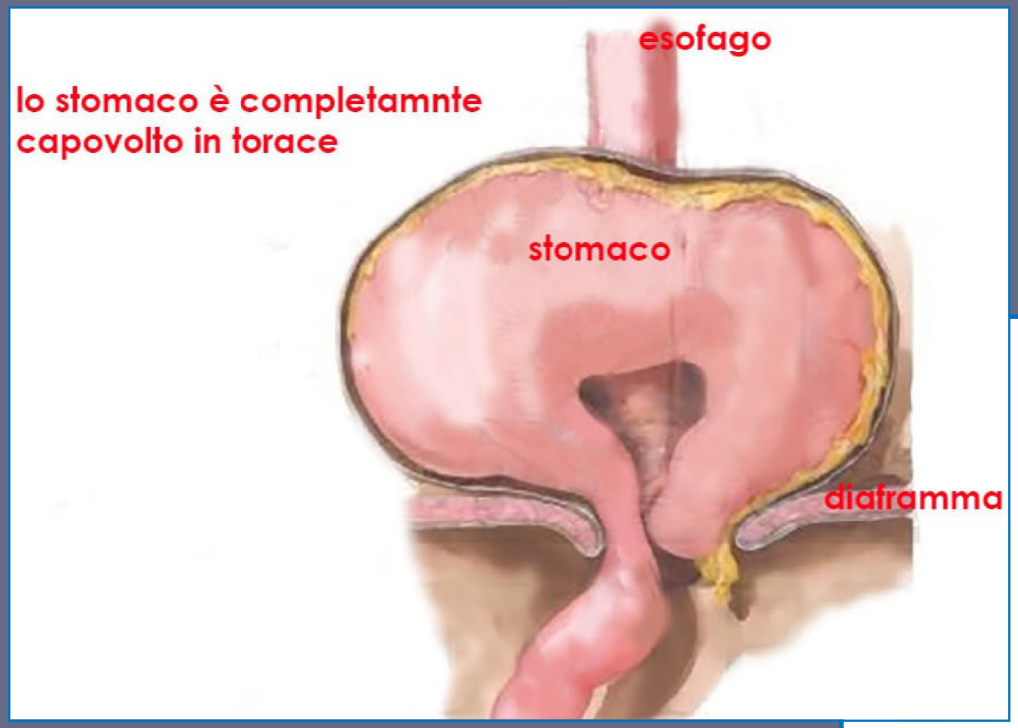
Sintomi Sistemici

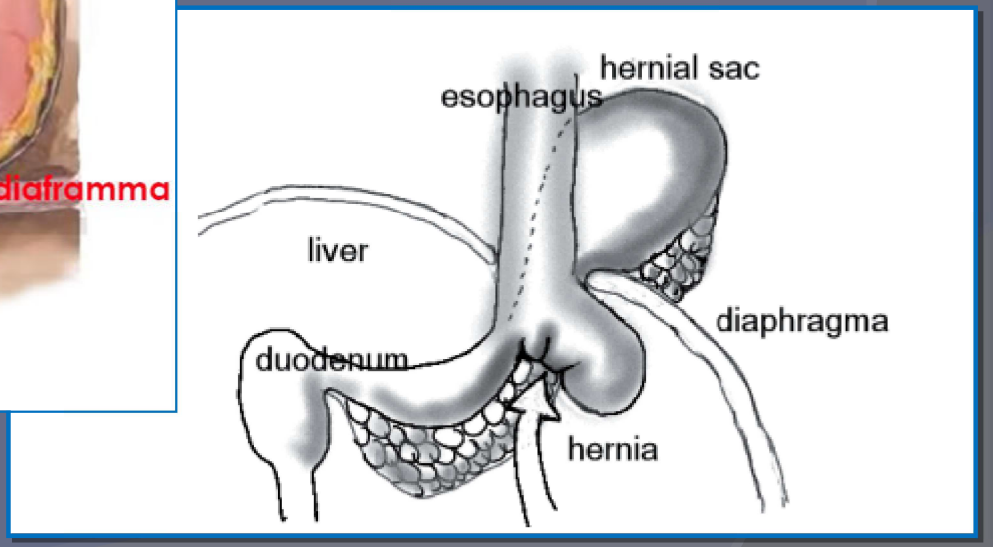
* Dolore al petto
* Dispnea
* Anoressia

Complicanze

volvolo

- Necrosi gastrointestinale
- Perforazione gastrica
- Emorragia massiva





In Acuto

è un’urgenza chirurgica !!!


mortalità del
42-56%
ALERT

Fatal complications of adult paraesophageal hernia: A population-based study

Eero I. Sihvo, MD, PhD,[a] Jarmo A. Salo, MD, PhD,[a] Jari V. Räsänen, MD, PhD,[a] and Tuomo K. Rantanen, MD, PhD[b]

Objectives: Data on mortality from paraesophageal hernia are scarce. This study focused on mortality associated with its natural history or conservative treatment.

Methods: For this population-based retrospective study, Finland's administrative databases provided preliminary data. Among 333 patients who died from benign esophageal diseases or hiatal hernias, analysis of medical records led us to include 32.

Results: From 1987 through 2001 in Finnish hospitals, 563 patients underwent surgical intervention and 67 underwent conservative treatment for paraesophageal hernia. This hernia caused death (mortality, 0.6/1,000,000 of the adult population; 95% confidence interval, 0–1.8/1,000,000) in 32 patients, 29 (91%) with concomitant diseases. The overall mortality rate for the 563 having surgical treatment was 2.7% (15 patients). Three died after elective repair. Of 67 patients hospitalized for symptomatic paraesophageal hernia and treated conservatively, 11 (16.4%) died in the hospital within a mean of 42 months (range, 2–96 months) from onset of symptoms. Four (13%) deaths might have been prevented by elective surgical intervention. Of the 32 deceased patients, 4 (12.5%) had type II, 16 (50%) had type III, and 9 (28.1%) had type IV hiatal hernias. In 3 (9.4%) patients type remained unknown. Death resulted from incarceration in 24 (75%), complications of surgical intervention in 6 (18.8%), and bleeding ulcer in 2 (6.2%).

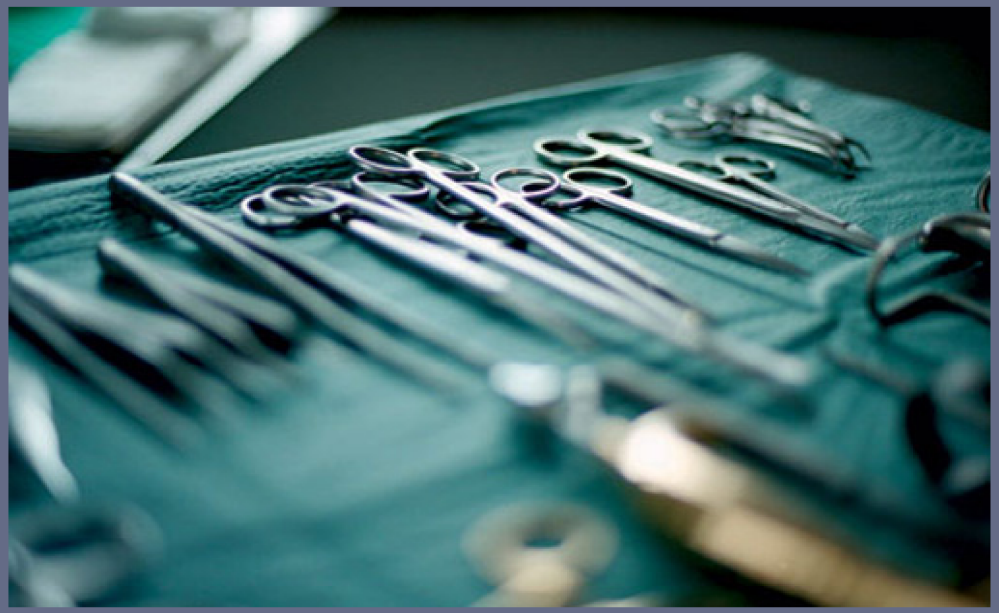
Conclusions: Overall, most deaths were related to type III or IV hernias in aged patients with concomitant diseases, with those with severe symptoms requiring hospitalization at significant risk. Except for those at high surgical risk, we recommend repair of the paraesophageal hernia, at least in symptomatic patients.

Trattamento conservativo

16.4%

mortalità

Trattamento chirurgico



2,7%

Mortalità

8%

Complicanze

Indicazione chirurgica

in elezione anche se ASINTOMATICI…

Tecnica Chirurgica

TRANSTHORACIC

VATS / THORACOTOMY

QUALE APPROCCIO

TRANSABDOMINAL

Nissen

TOUPET

DOR

LAPAROSCOPY / OPEN

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journal homepage: www.casereports.com

Case Series

Characteristics and outcomes of laparoscopic surgery in patients with large hiatal hernia. A single center study

Angela Romano*, Davide D'Amore, Giuseppe Esposito, Marianna Petrillo, Modestino Pezzella, Francesco Maria Romano, Giuseppe Izzo, Angelo Cosenza, Francesco Torelli, Antonio Volpicelli, Natale Di Martino

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ABSTRACT

INTRODUCTION: Giant hiatal hernia is characterized by the presence of more than 1/3 of the stomach in the chest, through the diaphragmatic hiatus, with or without other intra-abdominal organs. It is a rare pathology, representing the 5–10% of all hiatal hernias. The advent of laparoscopic surgery led to new surgical techniques, which include the simple reduction with the excision of the hernial sac and the execution of a posterior hiatoplasty, with or without mesh, and the execution of a Collis-Nissen gatroplasty in case of short esophagus.

PRESENTATION OF CASES: We followed 24 cases of giant hiatal hernia with more than 1/3 stomach located in the chest, analyzing the results reached by the miniinvasive procedure, and the long-term pathophysiologic results of the disease.

DISCUSSION: Laparoscopic hiatal hernia repair results in less postoperative pain compared with the open approach. The smaller incisions of minimally-invasive surgery are less likely to be complicated by incisional hernias and wound infection. Postoperative respiratory complications are reduced.

CONCLUSION: Results from multiple studies are similar, with shorter hospital stay and less morbidity resulting from the minimally invasive approach.

UPPER GUT

ANZJSurg.com

Laparoscopic repair of large hiatal hernias: clinical outcomes of 10 years

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Center of Minimally Invasive Surgery, Tianjin Nankai Hospital, Tianjin, China

Key words
hiatal hernia, laparoscopy, quality of life, recurrence.

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Z. Chen PhD; **H. Zhao** PhD; **X. Sun** PhD; **Z. Wang** PhD.

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doi: 10.1111/ans.14426

Abstract

Background: Whilst laparoscopic repair is the most common surgical procedure for the treatment of large hiatal hernias, knowledge of long-term outcomes (>10 years) is scarce. The aim of this study was to evaluate the long-term results following this approach, in particular the hernia recurrence rate and the impact of repair on quality of life (QoL).

Methods: Patients were identified from a prospective database. A standardized questionnaire was used to assess symptoms and a barium swallow radiograph was performed to determine anatomy. A validated QoL measure, Gastrointestinal Quality of Life Index (GIQLI) was also applied to all patients.

Results: Of the 69 eligible patients, clinical follow-up was available for 54 patients (78.3%). Follow-up ranged from 72 to 185 (median: 114) months. Post-operative heartburn and dysphagia were significantly improved, with 45 patients (83%) reporting a good or excellent result. Contrast radiology in 35 patients (65%) revealed recurrence in 12 patients (34%). Fifty-four patients answered the GIQLI questionnaire. The mean GIQLI score was 117 (61–136). Patients with objectively documented anatomic recurrence had a QoL index of 92 (61–121) compared to an index of 122 (77–136, $P < 0.01$) in the non-recurrent hernia group.

Conclusions: At mean 114 months follow-up, laparoscopic repair of large hiatal hernias achieves effective and durable relief of symptoms, and most patients are satisfied with the outcome.

Laparoscopic Repair of Hiatal Hernias: Experience after 200 Consecutive Cases

Miloš Bjelović[1,2], Tamara Babič[2], Dragan Gunjić[2], Milan Veselinović[2], Bratislav Špica[2]

[1]School of Medicine, University of Belgrade, Belgrade, Serbia;
[2]Department for Minimally Invasive Upper Digestive Surgery, Clinic for Digestive Surgery – First Surgical Clinic, Clinical Center of Serbia, Belgrade, Serbia

SUMMARY

Introduction Repair of hiatal hernias has been performed traditionally via open laparotomy or thoracotomy. Since first laparoscopic hiatal hernia repair in 1992, this method had a growing popularity and today it is the standard approach in experienced centers specialized for minimally invasive surgery.

Objective In the current study we present our experience after 200 consecutive laparoscopic hiatal hernia repairs.

Methods A retrospective cohort study included 200 patients who underwent elective laparoscopic hiatal hernia repair at the Department for Minimally Invasive Upper Digestive Surgery, Clinic for Digestive Surgery, Clinical Center of Serbia in Belgrade from April 2004 to December 2013.

Results Hiatal hernia types included 108 (54%) patients with type I, 30 (15%) with type III, 62 (31%) with giant paraesophageal hernia, while 27 (13.5%) patients presented with a chronic gastric volvulus. There were a total of 154 (77%) Nissen fundoplications. In 26 (13%) cases Nissen procedure was combined with esophageal lengthening procedure (Collis-Nissen), and in 17 (8.5%) Toupet fundoplications was performed. Primary retroesophageal crural repair was performed in 164 (82%) cases, Cleveland Clinic Foundation suture modification in 27 (13.5%), 4 (2%) patients underwent synthetic mesh hiatoplasty, 1 (0.5%) primary repair reinforced with pledgets, and 4 (2%) autologous fascia lata graft reinforcement. Poor result with anatomic and symptomatic recurrence (indication for revisional surgery) was detected in 5 patients (2.7%).

Conclusion Based on the result analysis, we found that laparoscopic hiatal hernia repair was a technically challenging but feasible technique, associated with good to excellent postoperative outcomes comparable to the best open surgery series.

ORIGINAL STUDY

Laparoscopic Repair of Paraesophageal Hernia

Long-term Follow-up Reveals Good Clinical Outcome Despite High Radiological Recurrence Rate

Bernard Dallemagne, MD†, Laurent Kohnen, MD†, Silvana Perretta, MD*, Joseph Weerts, MD†, Serge Markiewicz, MD†, and Constant Jehaes, MD†*

World J Surg (2013) 37:1878–1882
DOI 10.1007/s00268-013-2047-0

World Journal of Surgery

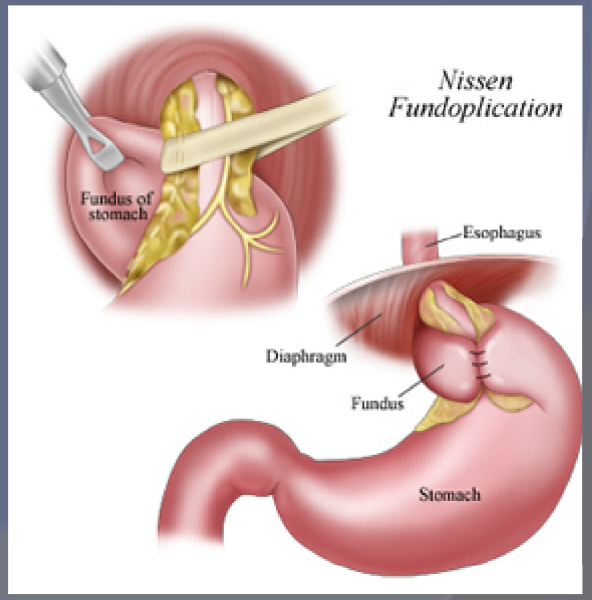
Long-Term Outcome and Quality of Life After Laparoscopic Treatment of Large Paraesophageal Hernia

Eduardo M. Targarona · Samuel Grisales · Ozlem Uyanik · Carmen Balague · Juan Carlos Pernas · Manuel Trias

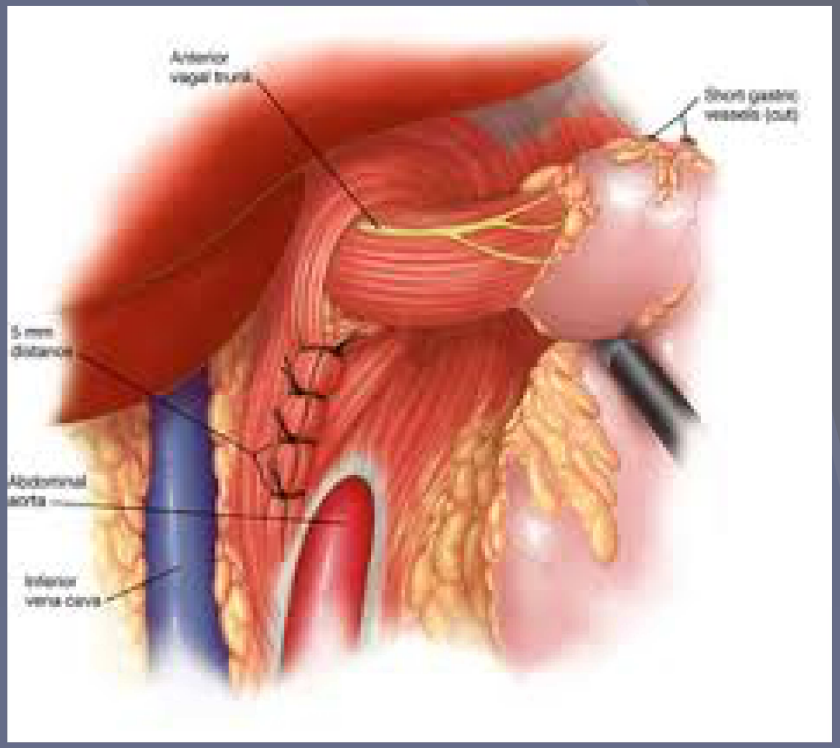
Published online: 19 April 2013

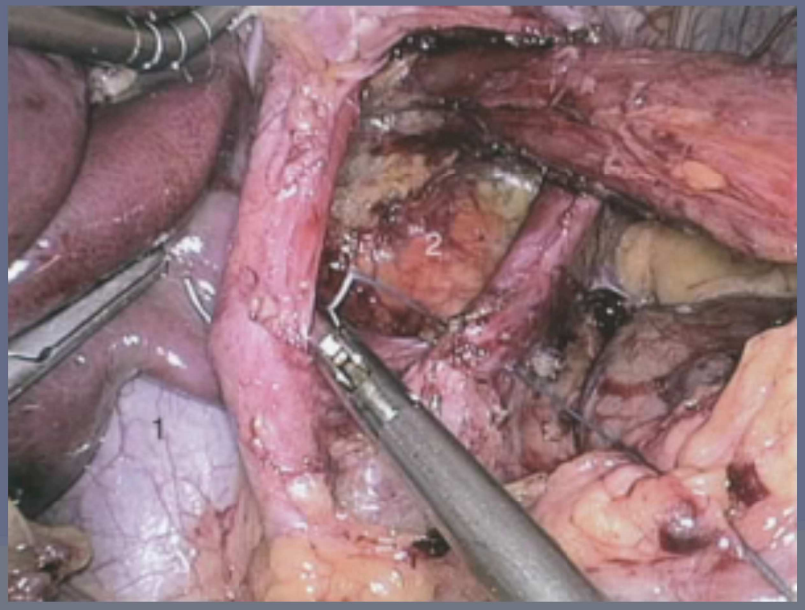
Tecnica Chirurgica
Nissen-Rossetti

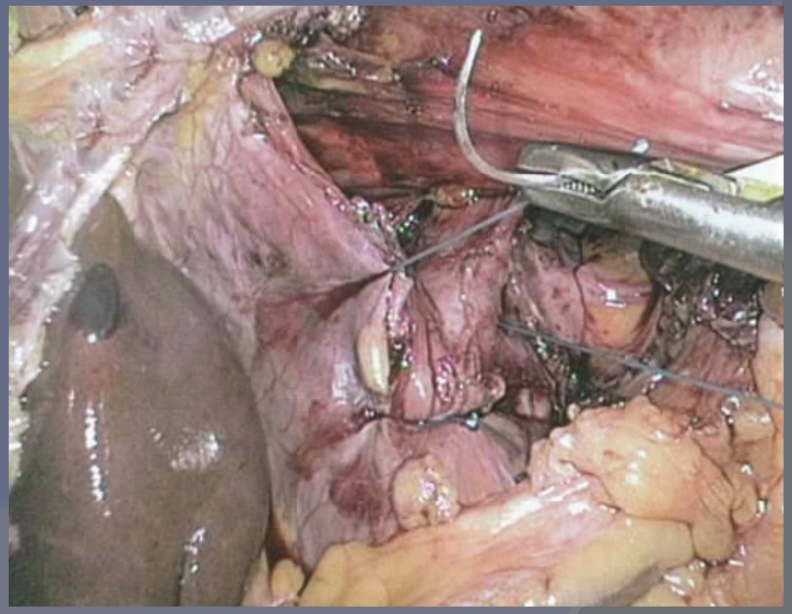
- **Mobilizzazione** del sacco erniario;
- **Riduzione** del sacco e di tutto il suo contenuto in addome;
- **Cruroplastica**
- **Gastroplastica** antireflusso

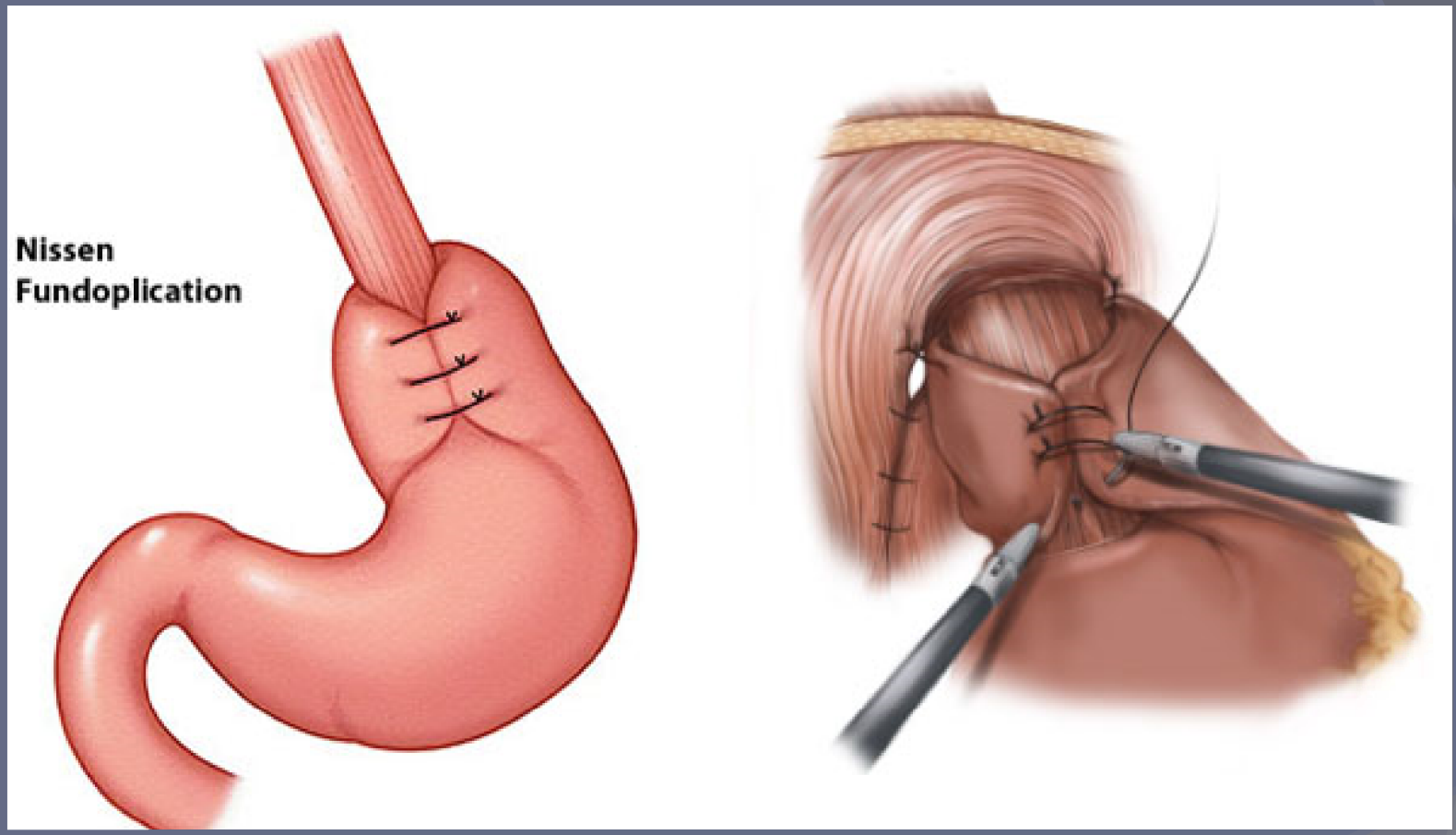


Cruroplastica autologa








Nissen
Fundoplication

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J Thorac Cardiovasc Surg. 2010 February ; 139(2): 395. doi:10.1016/j.jtcvs.2009.10.005.

Outcomes after a Decade of Laparoscopic Giant Paraesophageal Hernia Repair

James D. Luketich, MD[1], **Katie S. Nason, MD, MPH**[1], **Neil A. Christie, MD**[1], **Arjun Pennathur, MD**[1], **Blair A. Jobe, MD**[1], **Rodney J. Landreneau, MD**[1], and **Matthew J. Schuchert, MD**[1]
[1] University of Pittsburgh, Division of Thoracic Surgery, Pittsburgh, PA

Incidenza di **recidiva** riportata in letteratura dal **20%** al **60%**

Symptoms and the Association with Radiographic Recurrence—There was no difference in rates of symptomatic complaints between patients with a radiographic recurrence and those without radiographic recurrence. A radiographic recurrence was not associated with increased odds of recurrent symptoms. (Table 3)

Migliora la QoL

Quality of Life: Patient Satisfaction, GERD-HRQoL and SF-36—GERD-HRQoL questionnaires were completed by 489 of 662 patients (74%) at a median time of 30 months from initial operation (IQR 17–56 months). Using the GERD-HRQoL satisfaction scale, patient satisfaction with surgery and current symptoms was high. (Table 4) Radiographic recurrences did not have a significant impact on patient-reported satisfaction ($p=0.79$) or patient-reported reflux-related quality of life and did not require reoperation in the majority of cases.

Finally, overall patient satisfaction was assessed using the SF-36 instrument. A complete SF-36 was available for analysis in 476 of 662 patients at a median time from initial operation of 30 months (Table 4; IQR 17-56).

Plastica protesica

riduzione di recidive (dal 24% al 9%)

ORIGINAL ARTICLES

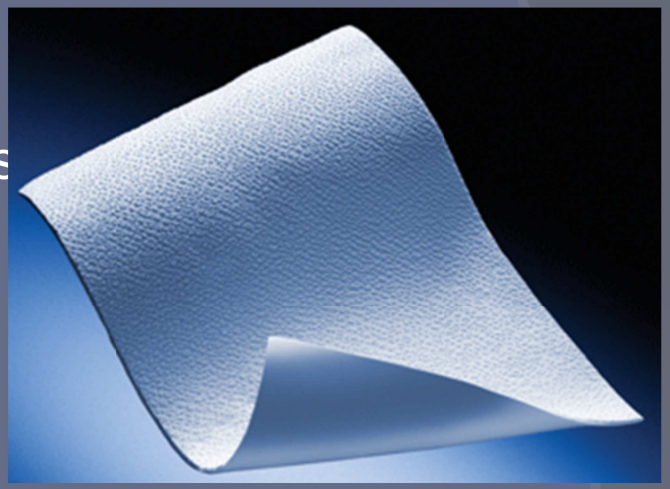
Biologic Prosthesis Reduces Recurrence After Laparoscopic Paraesophageal Hernia Repair

A Multicenter, Prospective, Randomized Trial

Brant K. Oelschlager, MD, Carlos A. Pellegrini, MD,* John Hunter, MD,† Nathaniel Soper, MD,‡ Michael Brunt, MD,§ Brett Sheppard, MD,† Blair Jobe, MD,† Nayak Polissar, PhD,‖ Lee Mitsumori, MD,* James Nelson, MD,* and L. Swanstrom, MD¶*

Quale ?

Protesi **riassorbibile biologica** (sottomucos
porcina)



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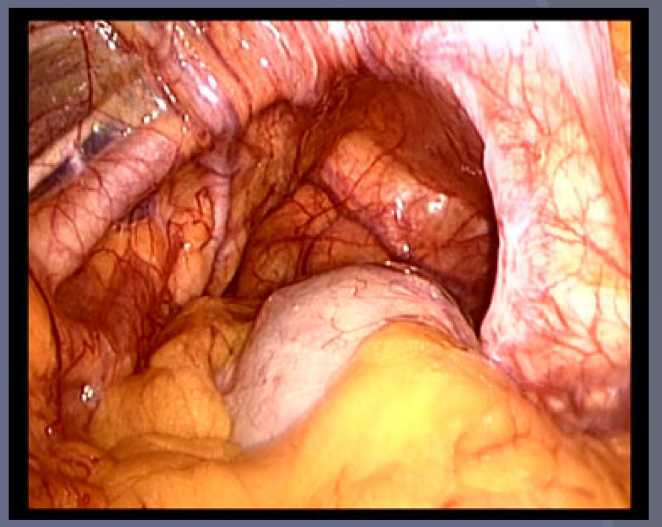
Protesi in **PTFE** (non riassorbibili)
rischio di dislocazione ed erosione esofagea con i movimenti diaframmatici

Quando ?

- Pilastri diaframmatici esili
- Tensione tra i pilastri



ORIGINAL STUDY

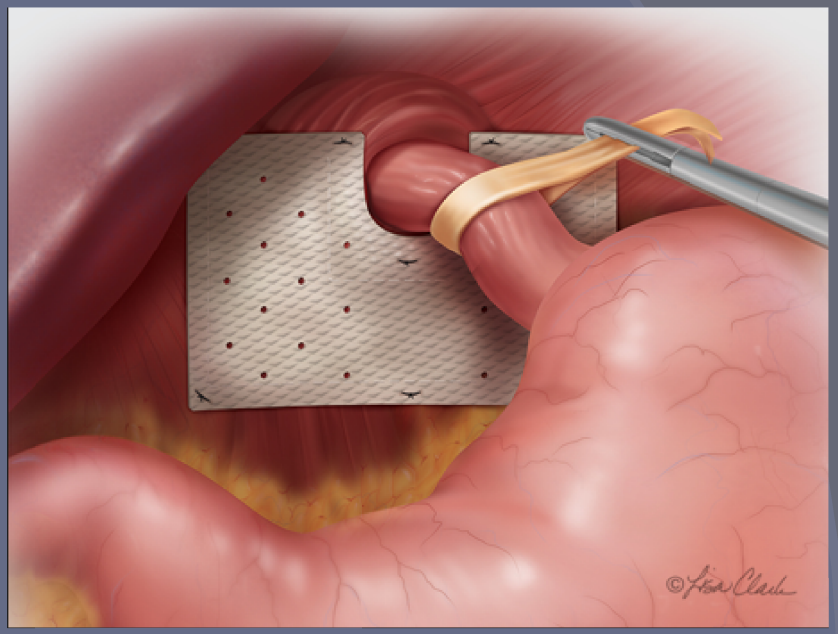
Laparoscopic Repair of Paraesophageal Hernia

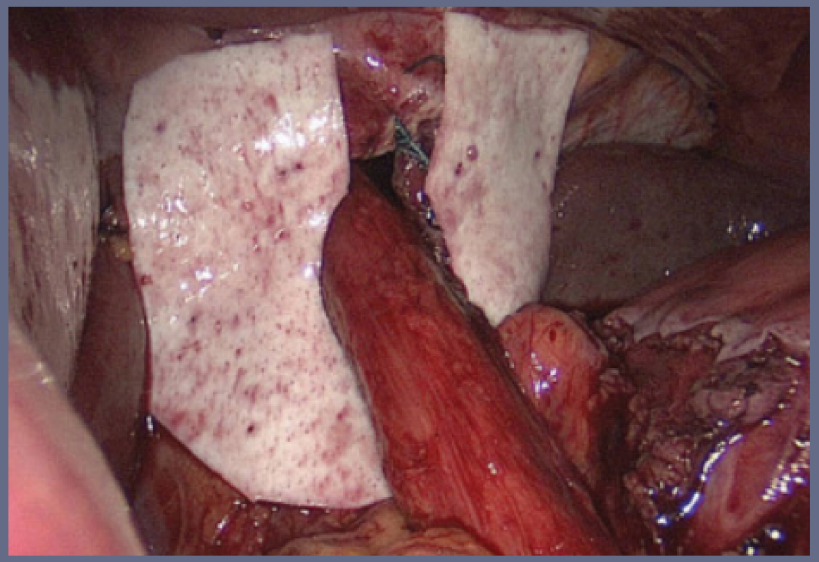
Long-term Follow-up Reveals Good Clinical Outcome Despite High Radiological Recurrence Rate

Bernard Dallemagne, MD†, Laurent Kohnen, MD†, Silvana Perretta, MD*, Joseph Weerts, MD†, Serge Markiewicz, MD†, and Constant Jehaes, MD†*

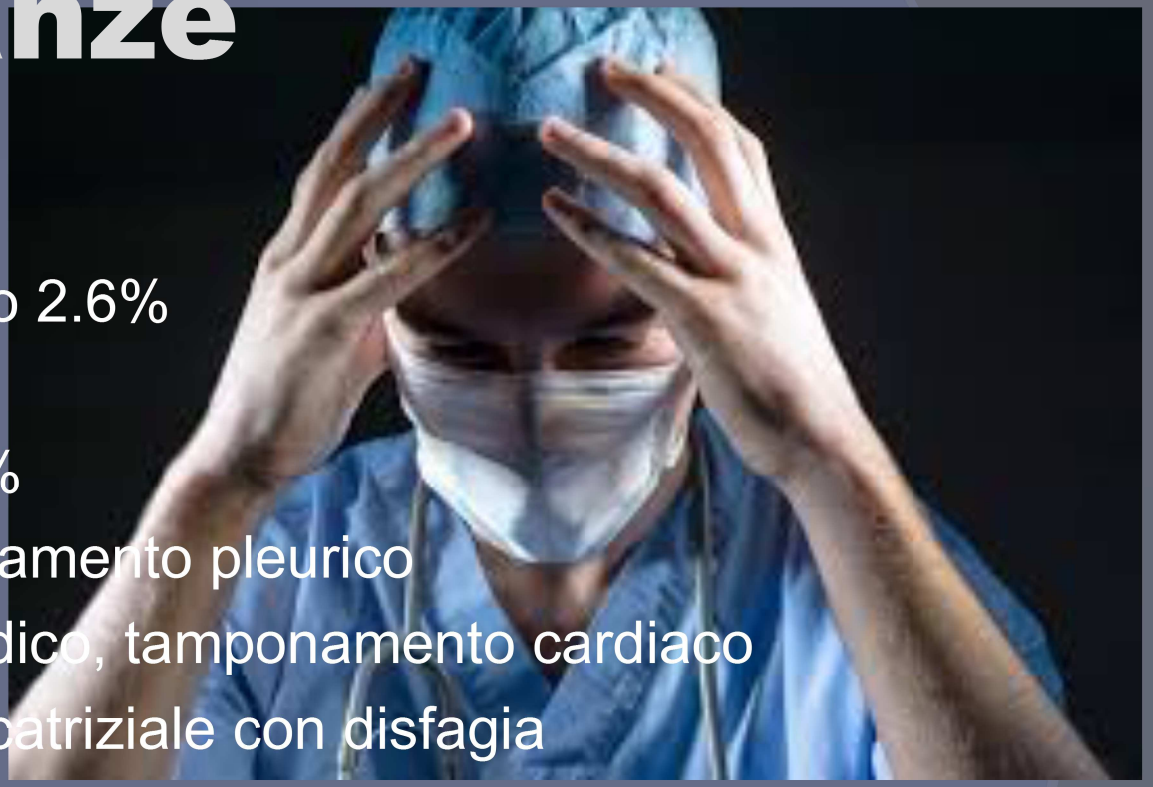
Annals of Surgery • Volume 253, Number 2, February 2011

Cruroplastica protesica





Complicanze



- Polmonite 4%
- Scompenso cardiaco 2.6%
- TEP 3.4%
- Leak esofageo 2.5 %
- Pneumotorace, versamento pleurico
- Versamento pericardico, tamponamento cardiaco
- Stenosi esofagea cicatriziale con disfagia
- Lesioni grossi vasi
- Lesioni intestinali
- Infezioni
- … …

Incremento Mortalità post-operatoria

- Età >80 anni
- BMI >35
- Comorbilità maggiori

Published in final edited form as:
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[1] University of Pittsburgh, Division of Thoracic Surgery, Pittsburgh, PA

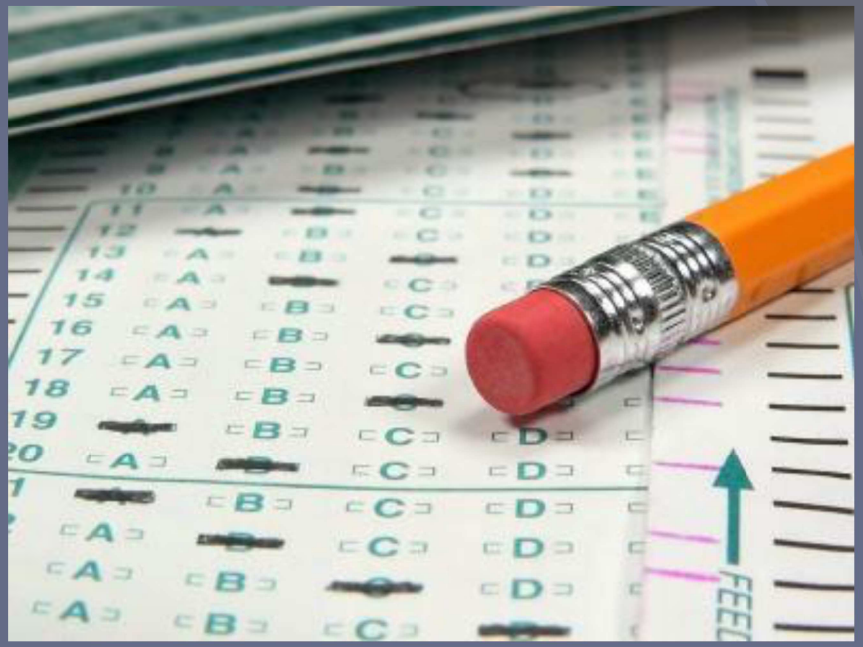
Indicazione chirurgica

in elezione anche se ASINTOMATICI e in caso di NON gravi comorbilità

Nostra Casistica

dal 2010 ad od oggi

Tipo I-II	10%
Tipo III	55%
Tipo IV	35%



- **60 pazienti**
- **33 laparoscopia**
- **55 Fundoplicatio** sec.Nissen
- **6** cruroplastica **protesica**
- **7 pz con complicanze** (stenosi esofagea, versamento pleurico, insuff. Resp acuta)
- **2 Recidive** con indicazione chirurgica
- **1 decesso**

CONCLUSIONI

Riparazione laparoscopica delle ernie paraesofagee: un approccio "evidence-based"

TABELLA 1 - EVIDENZA SCIENTIFICA SULLA RIPARAZIONE LAPAROSCOPICA DELLE ERNIE PARAESOFAGEE.

Pratica comune senza evidenza scientifica	Evidenza scientifica
L'approccio laparoscopico non è indicato per questi pazienti	L'approccio laparoscopico è lo standard da adottare
L'esofago corto è quasi sempre presente	Lo stomaco può essere ridotto nell'addome. Un intervento di allungamento dell'esofago è di rado necessario
Una protesi iatale (non) dovrebbe essere (mai) sempre utilizzata	La protesi dovrebbe essere utilizzata in casi selezionati, specialmente quando i pilastri del diaframma sono sottili o quando vi è tensione
Una gastropessi (non) dovrebbe essere (mai) sempre utilizzata	La fundoplicatio è la migliore forma di gastropessi e controlla il reflusso nella maggior parte dei pazienti

CONCLUSIONI

- Esperienza in **chirurgia laparoscopica** e in **chirurgia toraco-esofagea**

- Collaborazione con l'**Endoscopia Interventistica**


thank
you
all


IT'S TIME FOR
a
Coffee
BREAK