



# ενδοσκοπική θεραπεία της ΓΟΠΝ

Γεράσιμος Στεφανίδης

Διευθυντής Γαστρεντερολογικής Κλινικής Ν.Ν.Α.



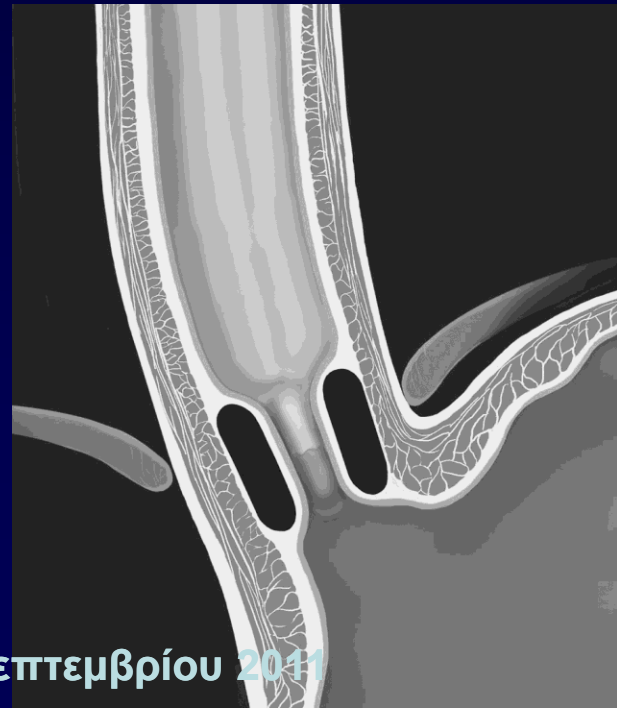
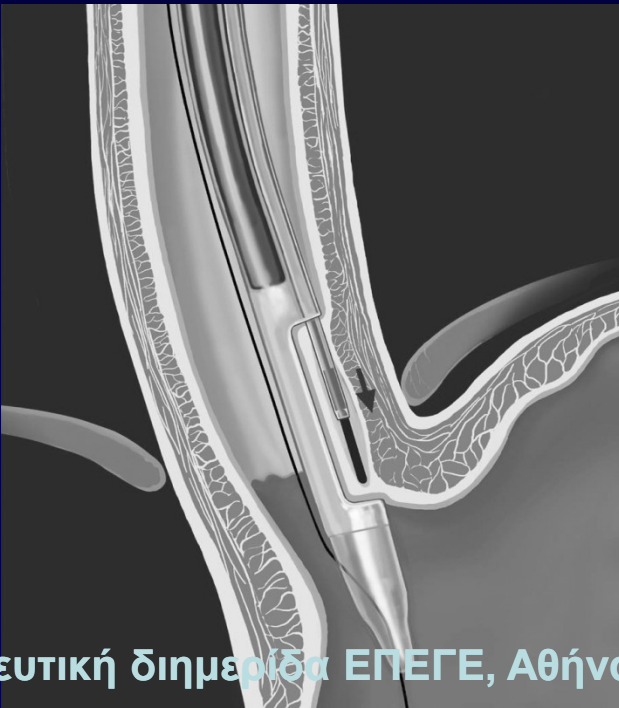
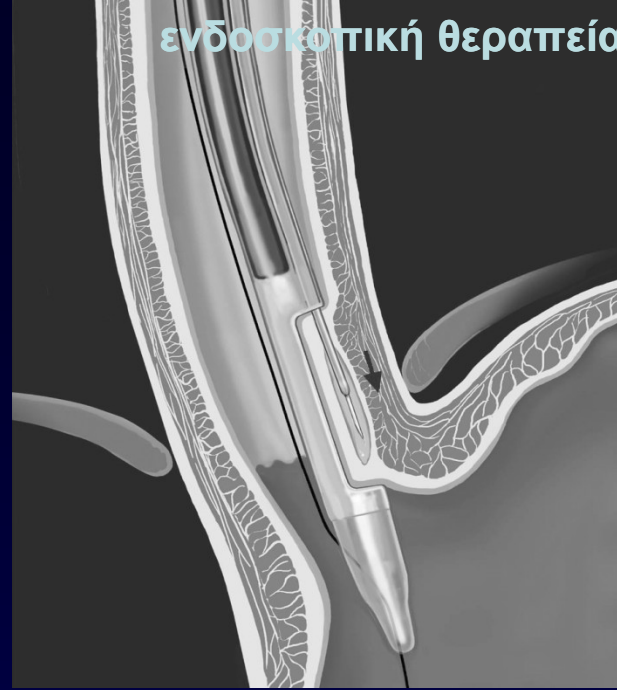
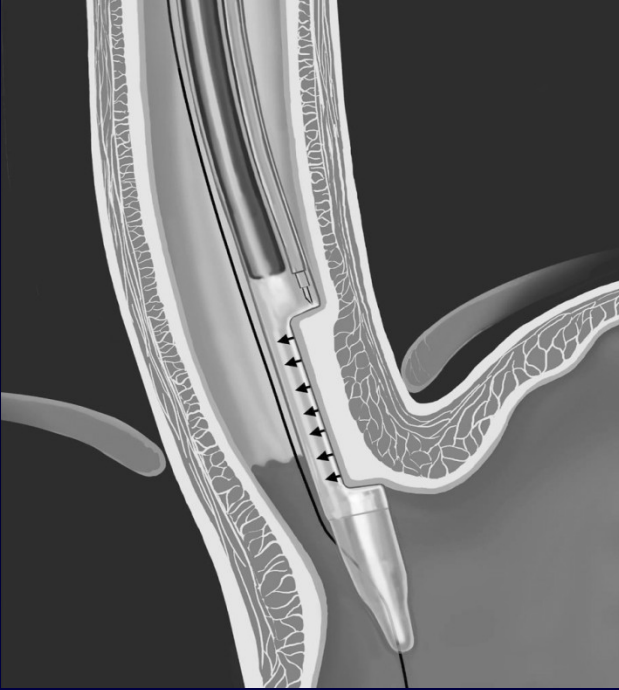
9η Εκπαιδευτική διημερίδα ΕΠΕΓΕ, Αθήνα 24-25 Σεπτεμβρίου 2011



**ΠΟΙΕΣ ΤΕΧΝΙΚΕΣ  
ενδοσκοπικής θεραπείας υπάρχουν;**

## στόχοι ενδοσκοπικής θεραπείας της ΓΟΠΝ

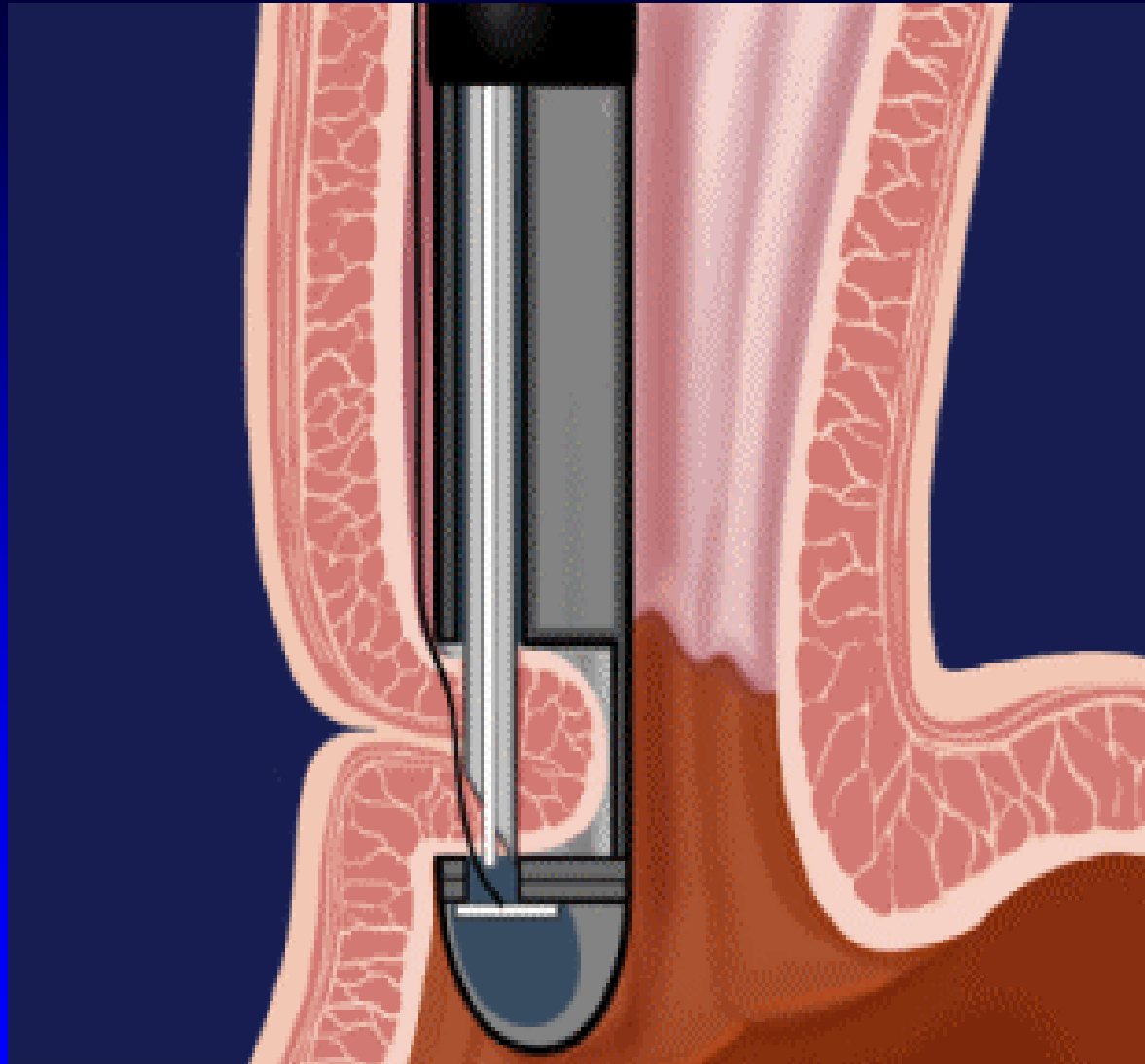
- αύξηση της πίεσης του ΚΟΣ
- αύξηση του μήκους της ζώνης πίεσης στη ΓΟΣ
- μείωση της διάτασης της καρδιακής μοίρας μεταγευματικά
- αποκατάσταση της οξείας γωνίας του Hiss





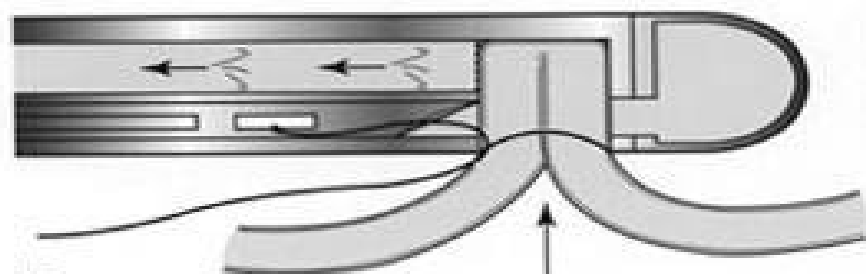
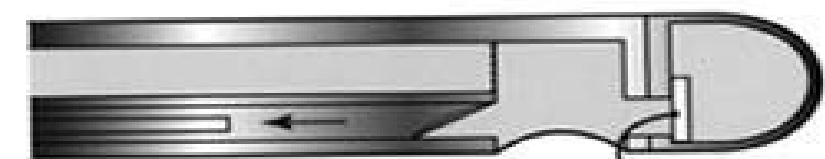


# ενδοσκοπική θεραπεία της ΓΟΠΝ Τοποθέτηση ράμματος διά της βελόνης

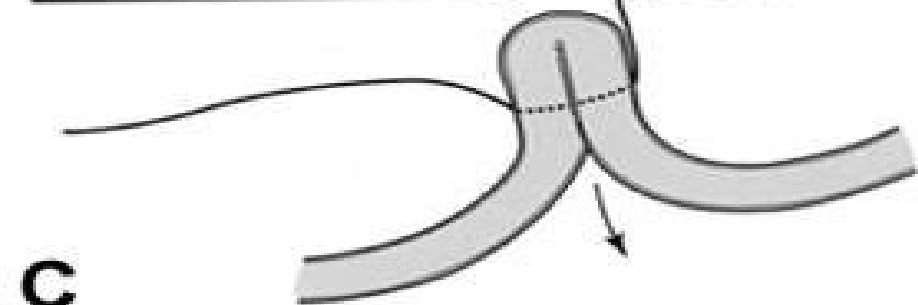




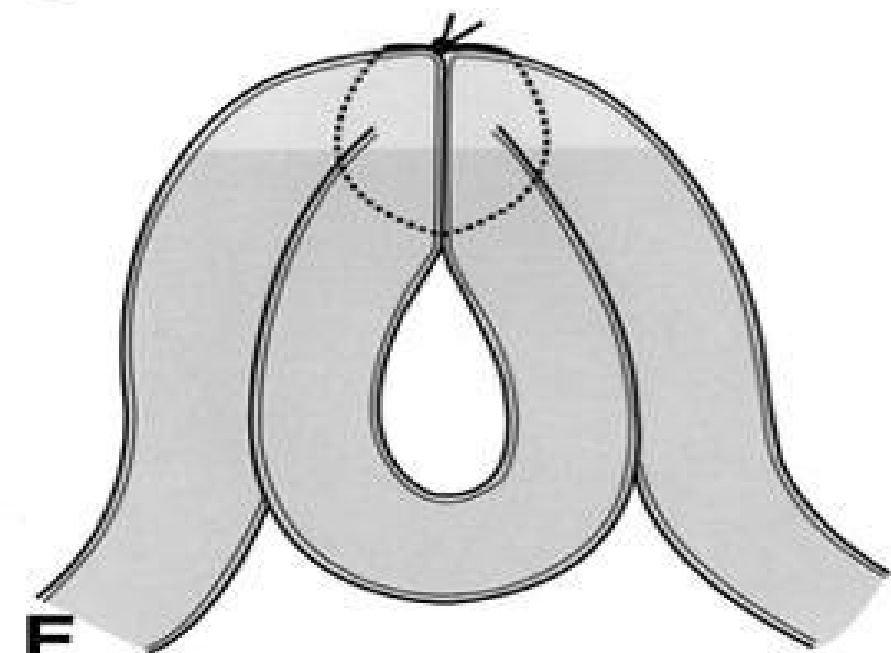
**A**



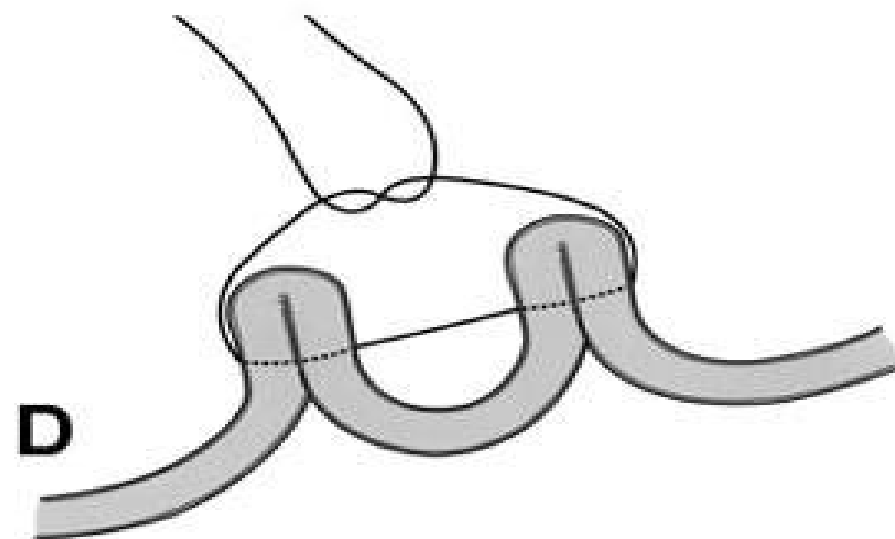
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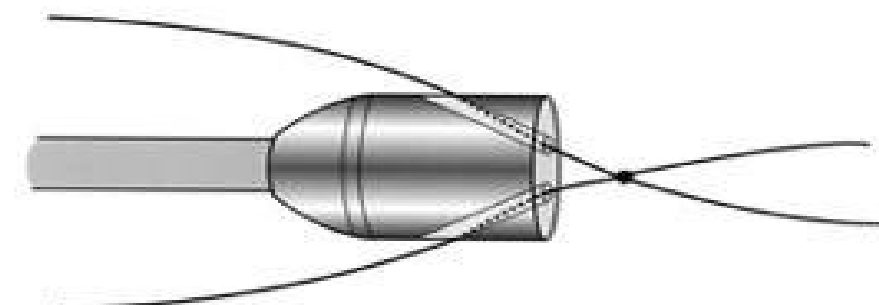
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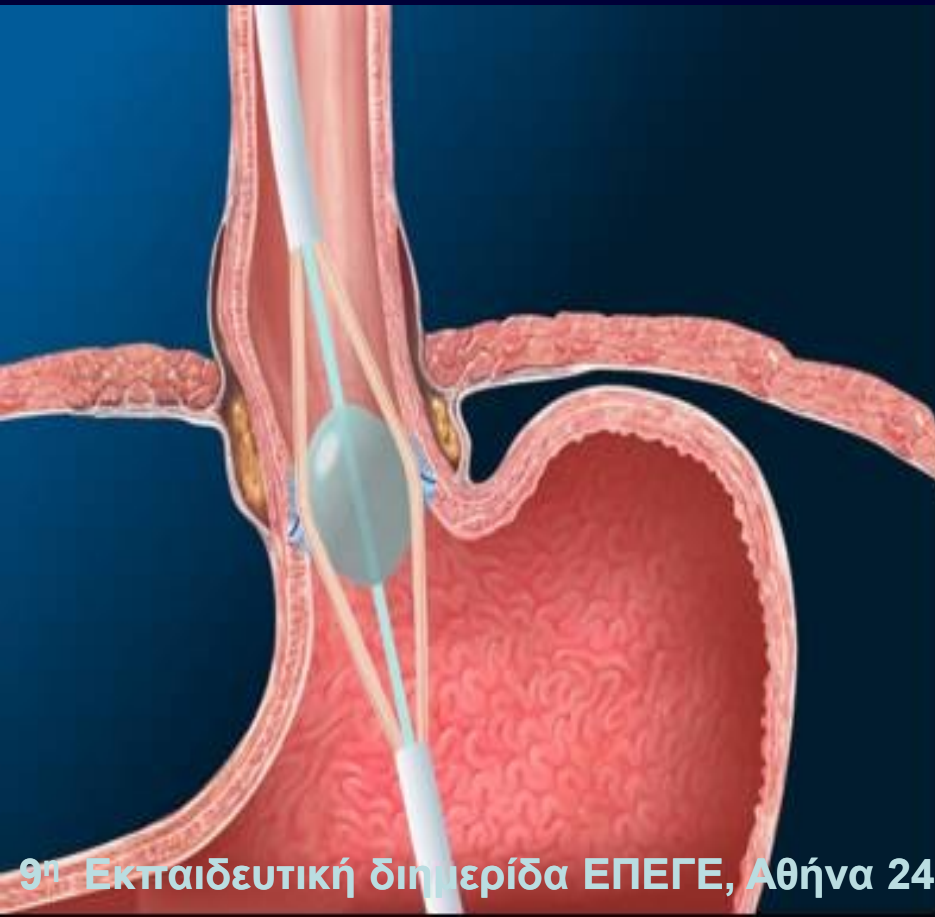
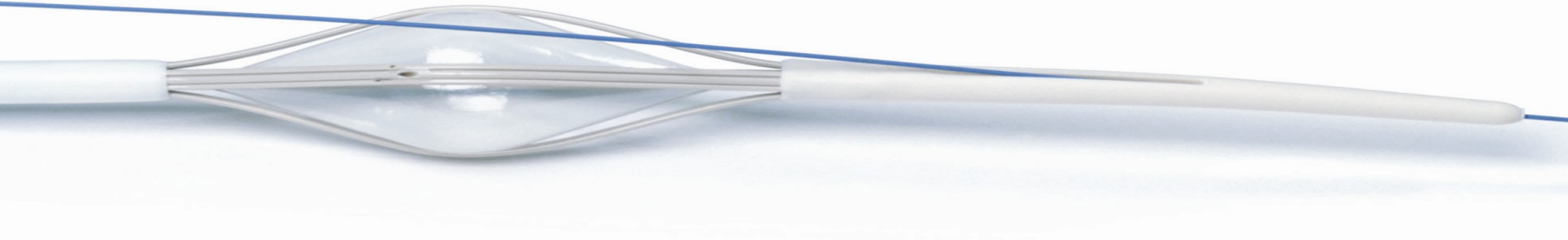
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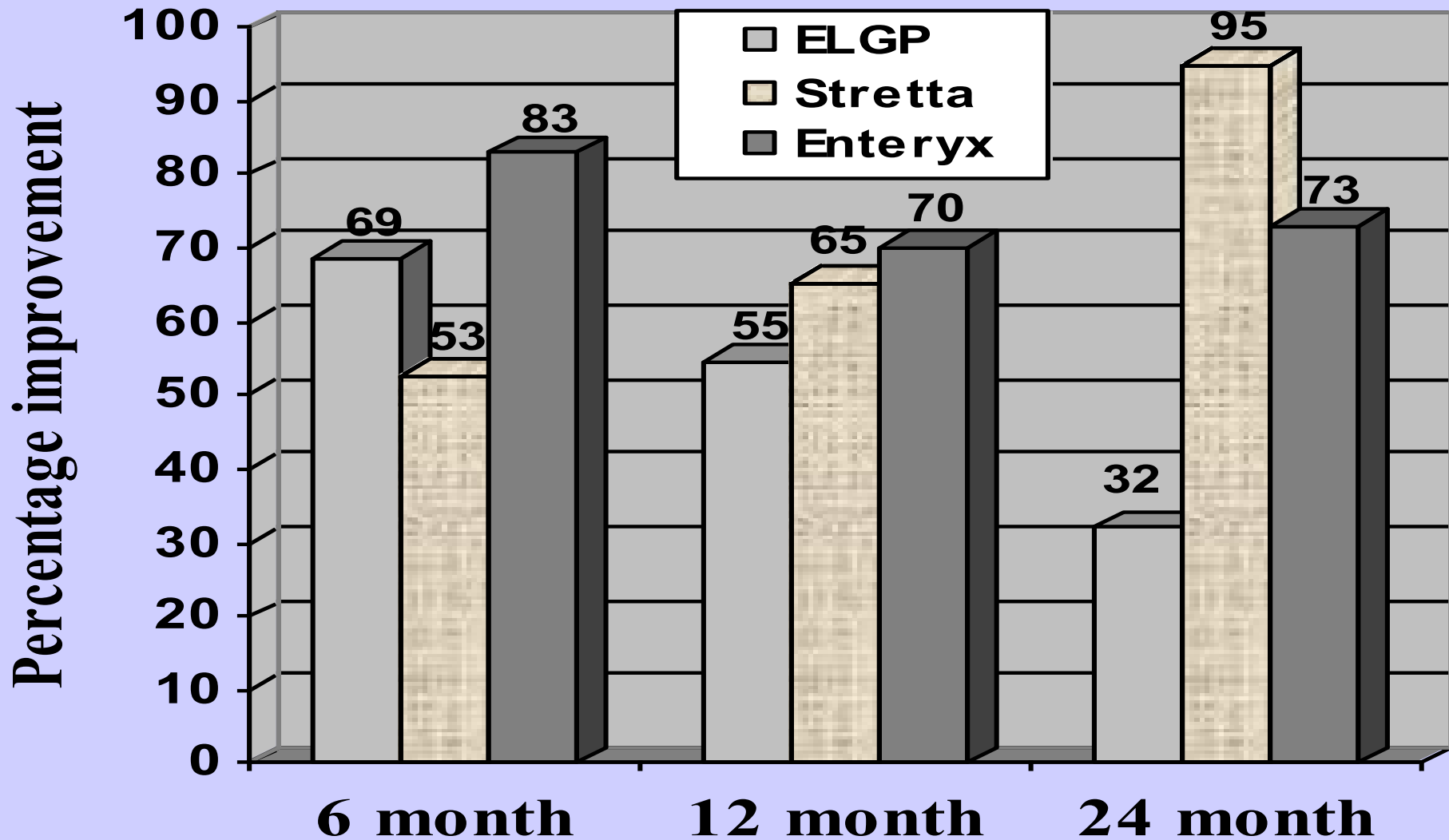
**D**



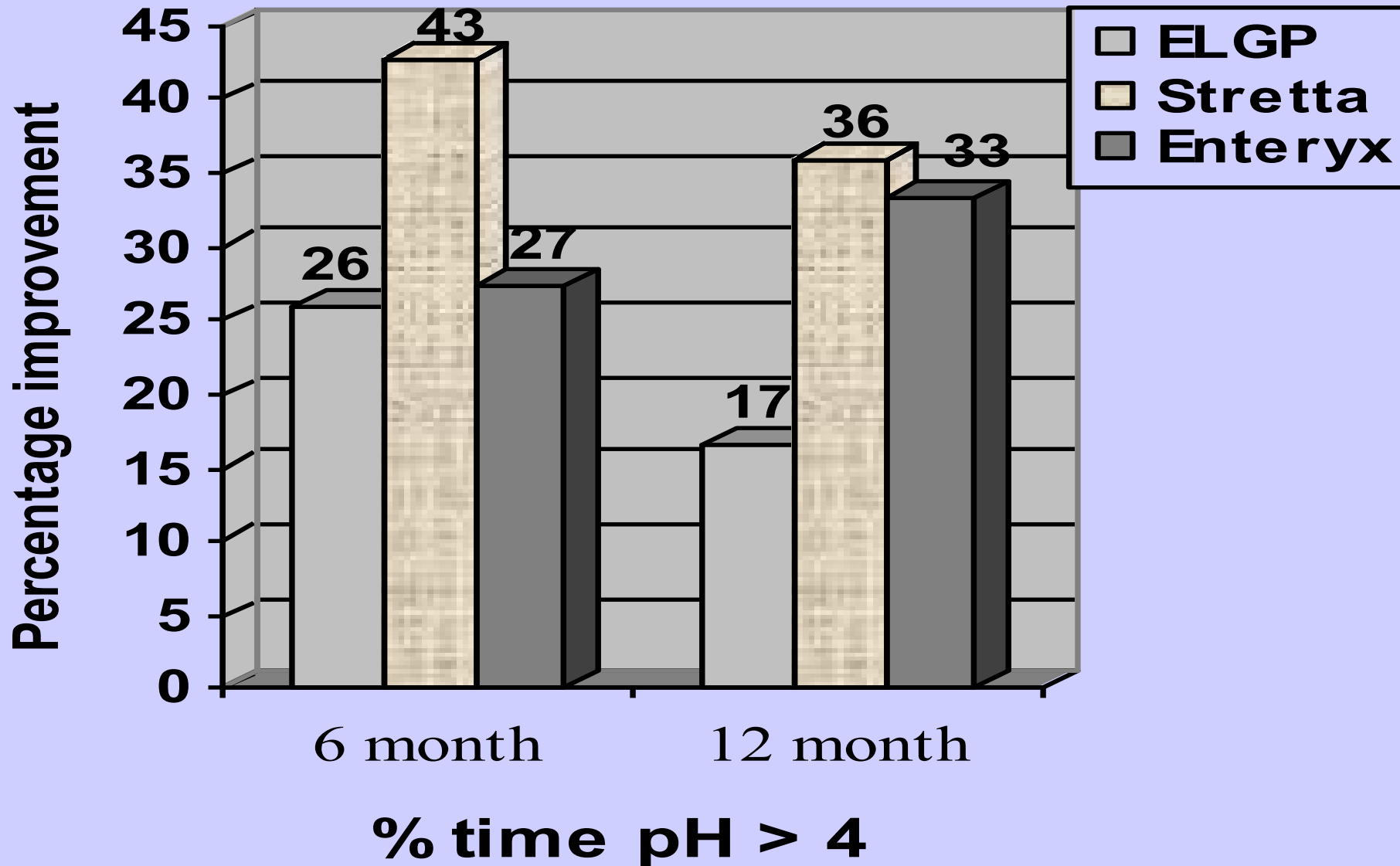
**F**

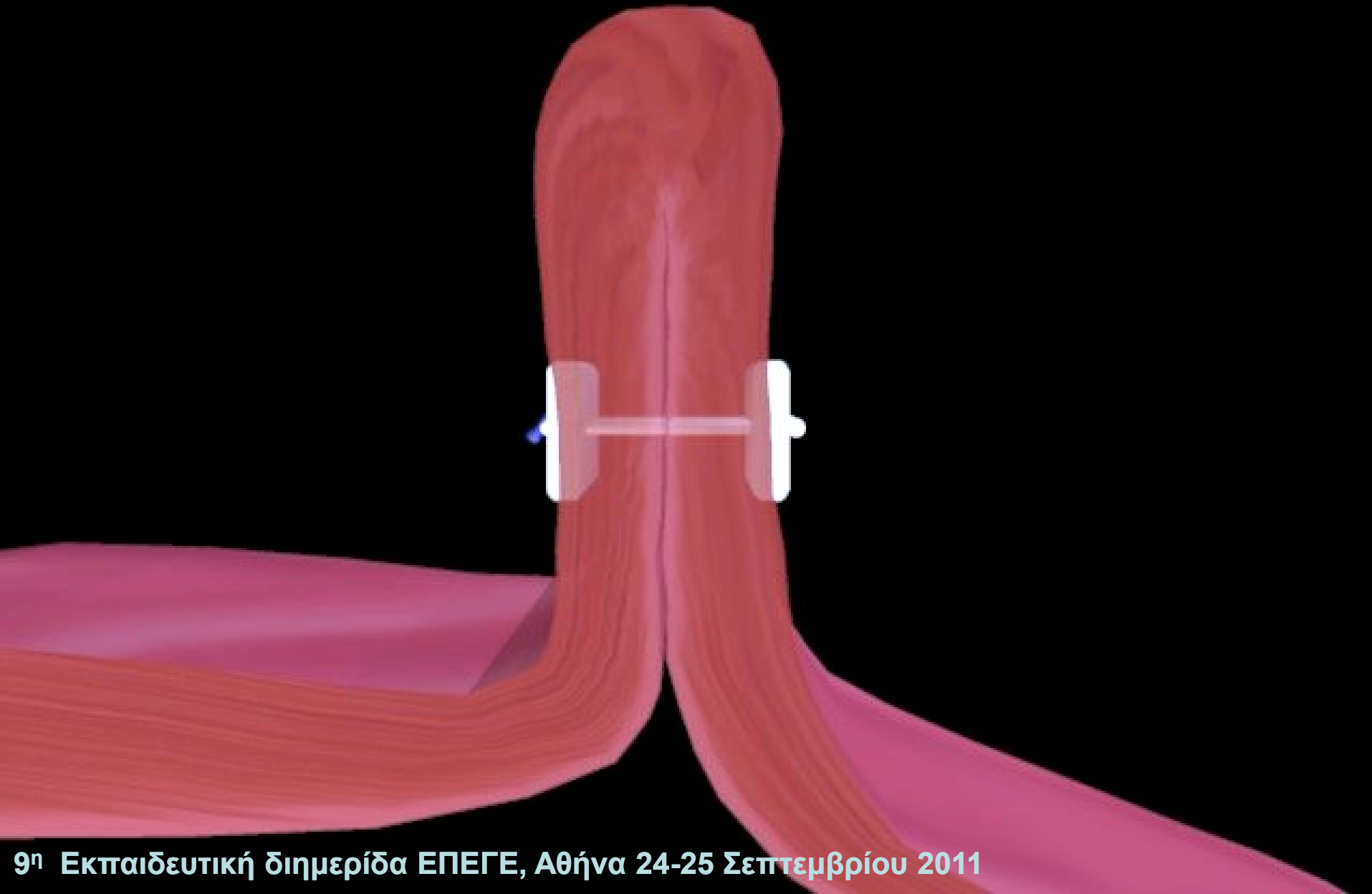


# Symptom index



# pHmetry improvement



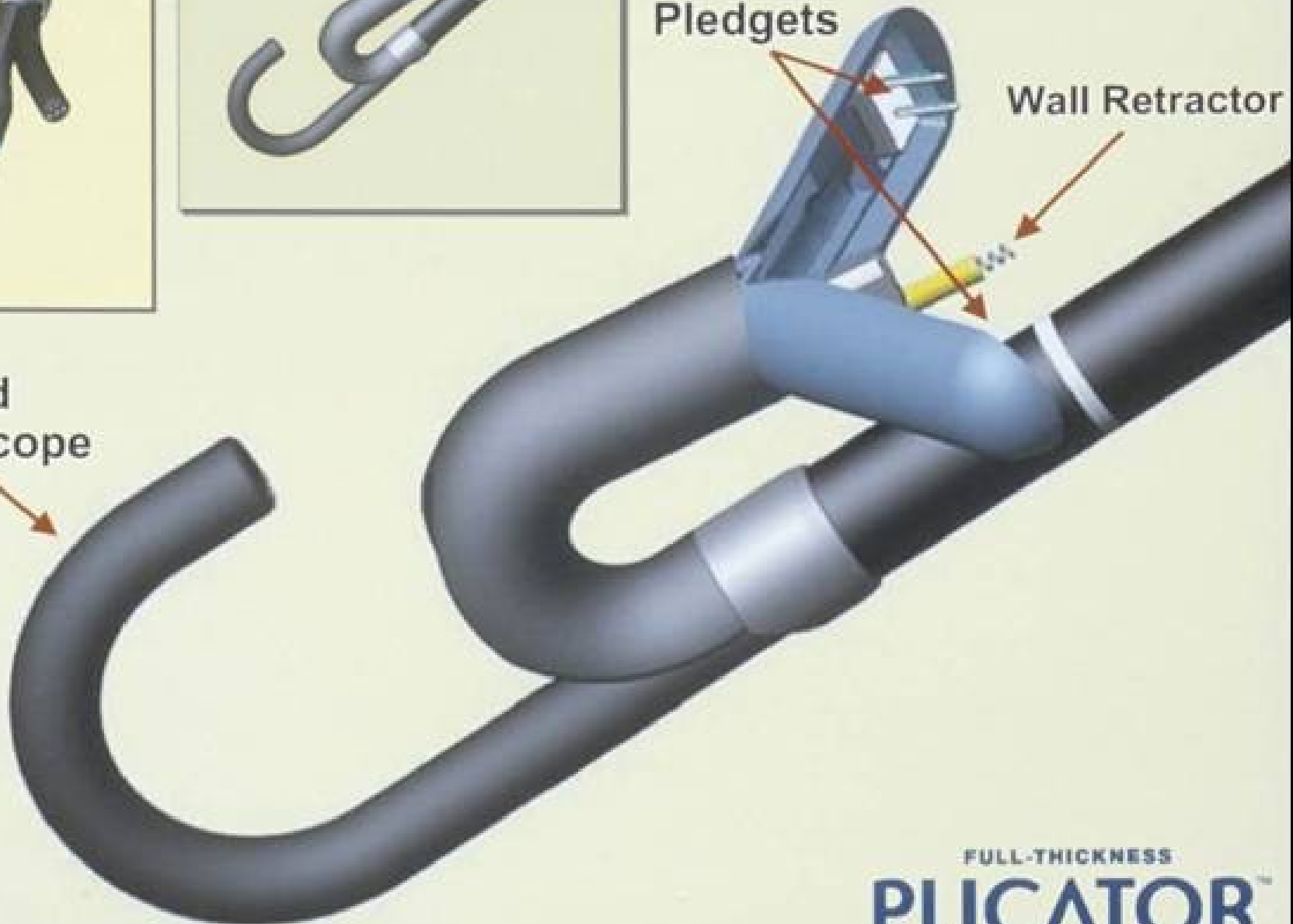




ePTFE  
Pledgets

Wall Retractor

Standard  
Gastroscope



FULL-THICKNESS  
**PLICATOR™**



Arms opened;  
tissue retractor  
advanced





## **ndo-plicator safety and feasibility -a pilot study-**

- **5 of the 6 patients improved significantly the pH-metry score and the symptom index**
- **1 of the 6 patients that did not benefit, underwent laparoscopic Nissen with excellent outcome**
- **3 of the 5 patients discontinued PPIs completely**

*Chuttani et al. GI Endoscopy 2003; 58(5):770-6*

## **ndo-plicator** **12 months follow-up**

- **80% improved significantly the pH-metry score**
- **1/3 had a normal pH-metry**
- **70% discontinued PPIs completely**

*Pleskow et al. GI Endoscopy 2005; 61:643-9*

## **ndo-plicator 36 months follow-up !**

- **HRQL 59 → 55%**
- **60% off PPIs**

Pleskow et al. *Surg Endosc* 2007; 21(3):439-44

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## **ndo-plicator 5 years follow-up !!**

*Pleskow et al. Surg Endosc 2008; 22:326–332*

## **ndo-plicator randomized, sham-controlled trial**

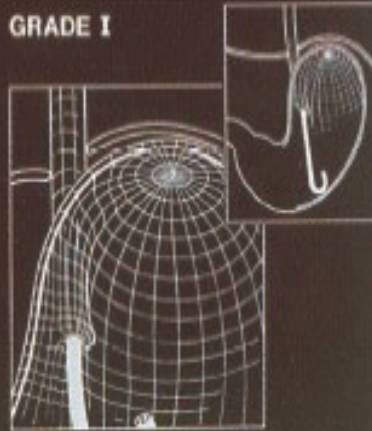
The full thickness fundoplication compared with placebo, reduces more effectively

- GERD symptoms
- frequency of PPI use
- esophageal exposure to acid (  $\text{pH} < 4$  )

*Rothstein et al. Gastroenterology 2006; 131:704-712*



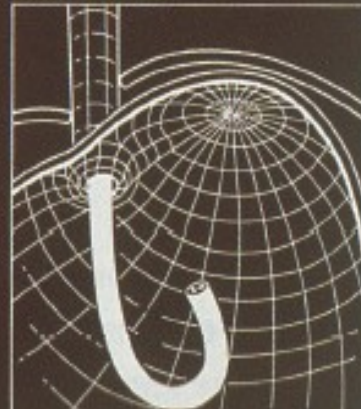
GRADE I



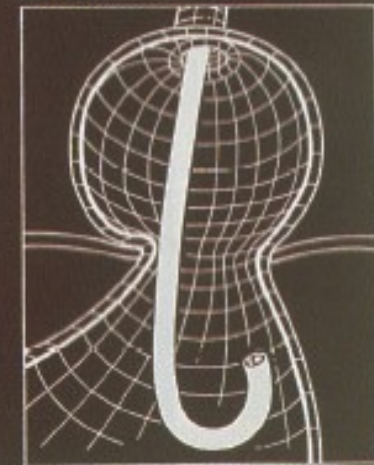
GRADE II



GRADE III

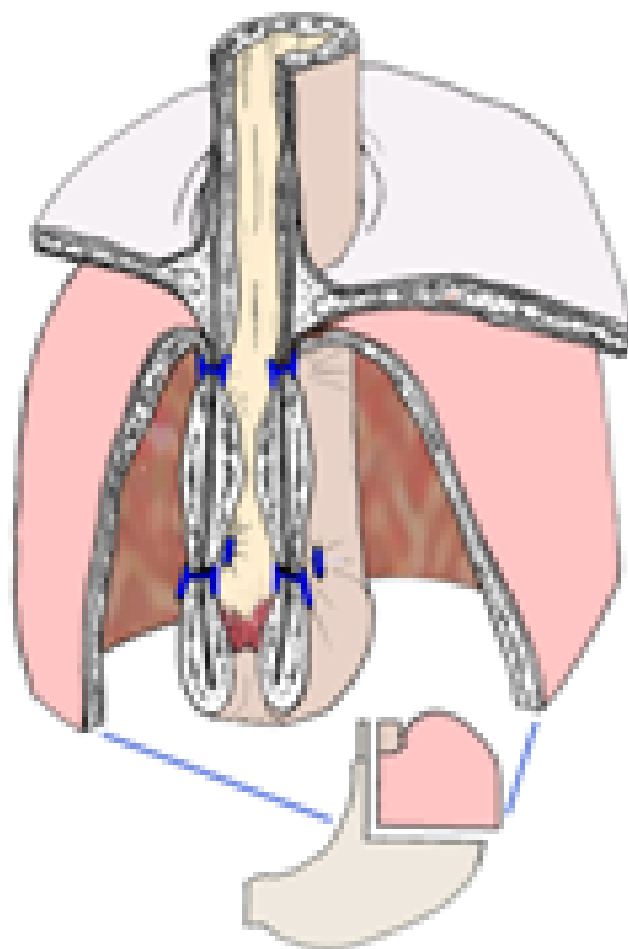


GRADE IV

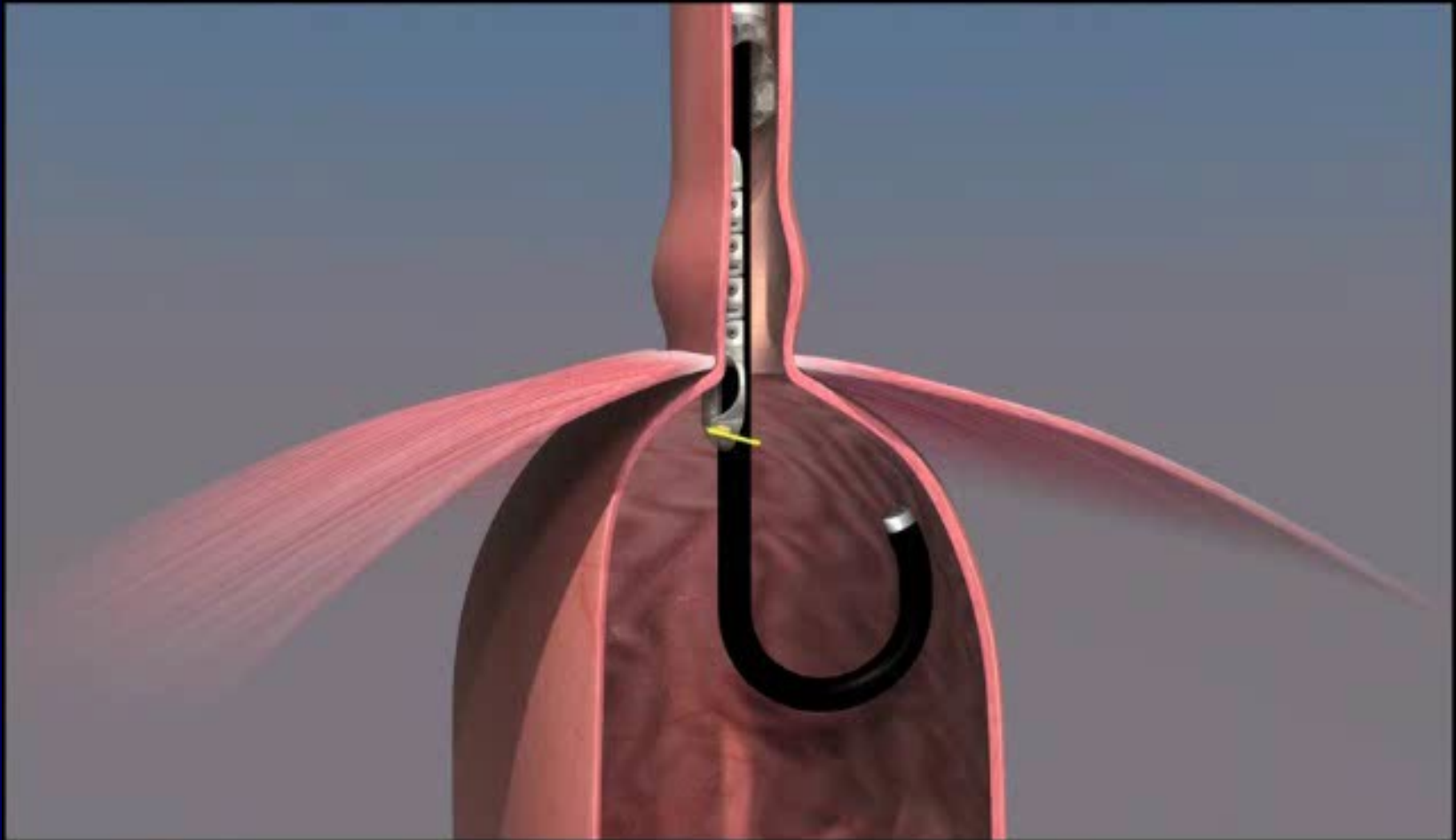


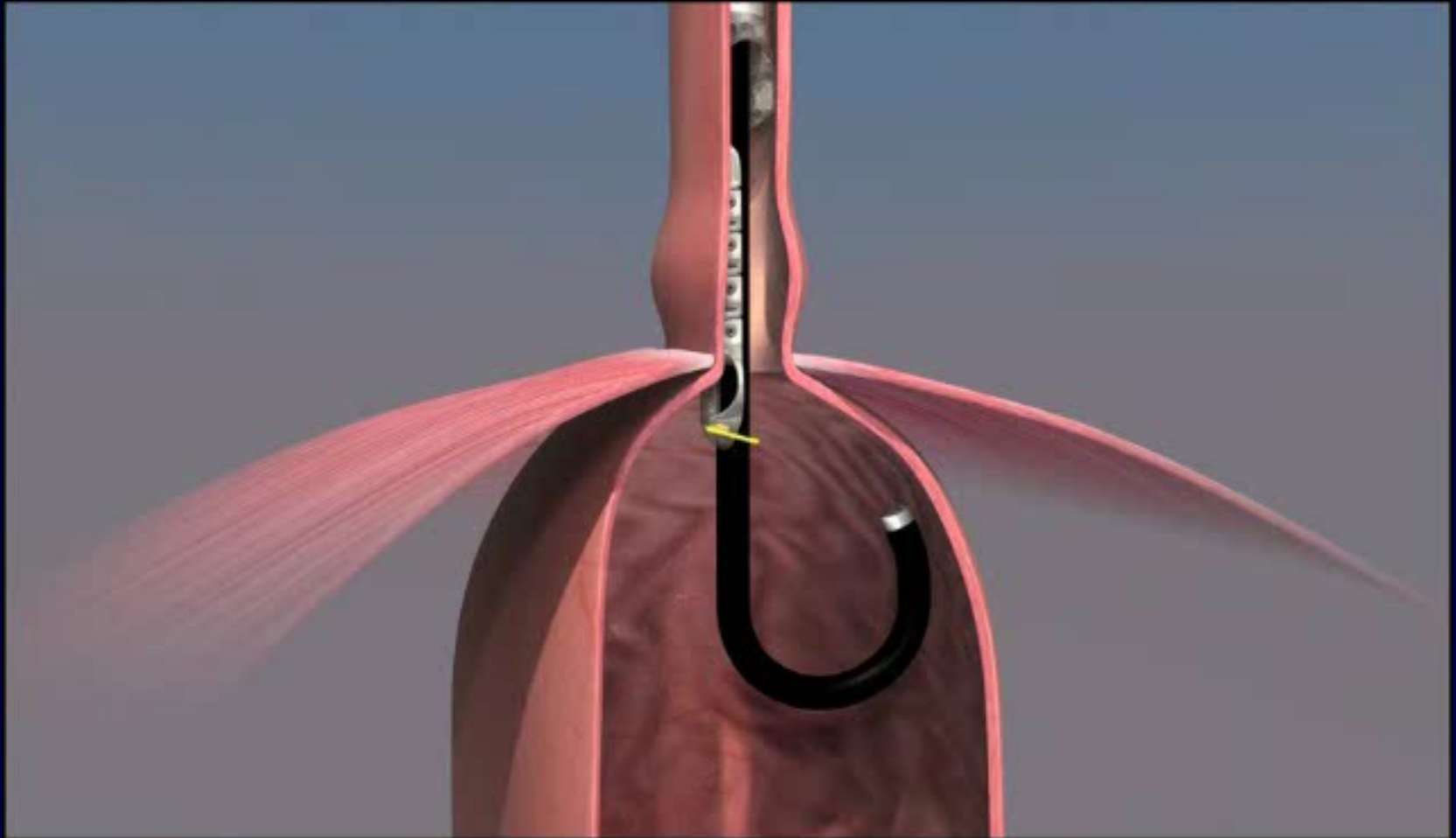
## **ESOPHYX**

**ποιες οι βασικές αρχές της μεθόδου;**



- Tighten anti-reflux barrier
- Lengthening of high pressure zone
- Recreated mechanical dynamics of the Angle of His
- Enveloped esophagus is compressed and more competent
- Hiatal hernia reduced 2cm or less
- 3 – 5 cm flap valve created

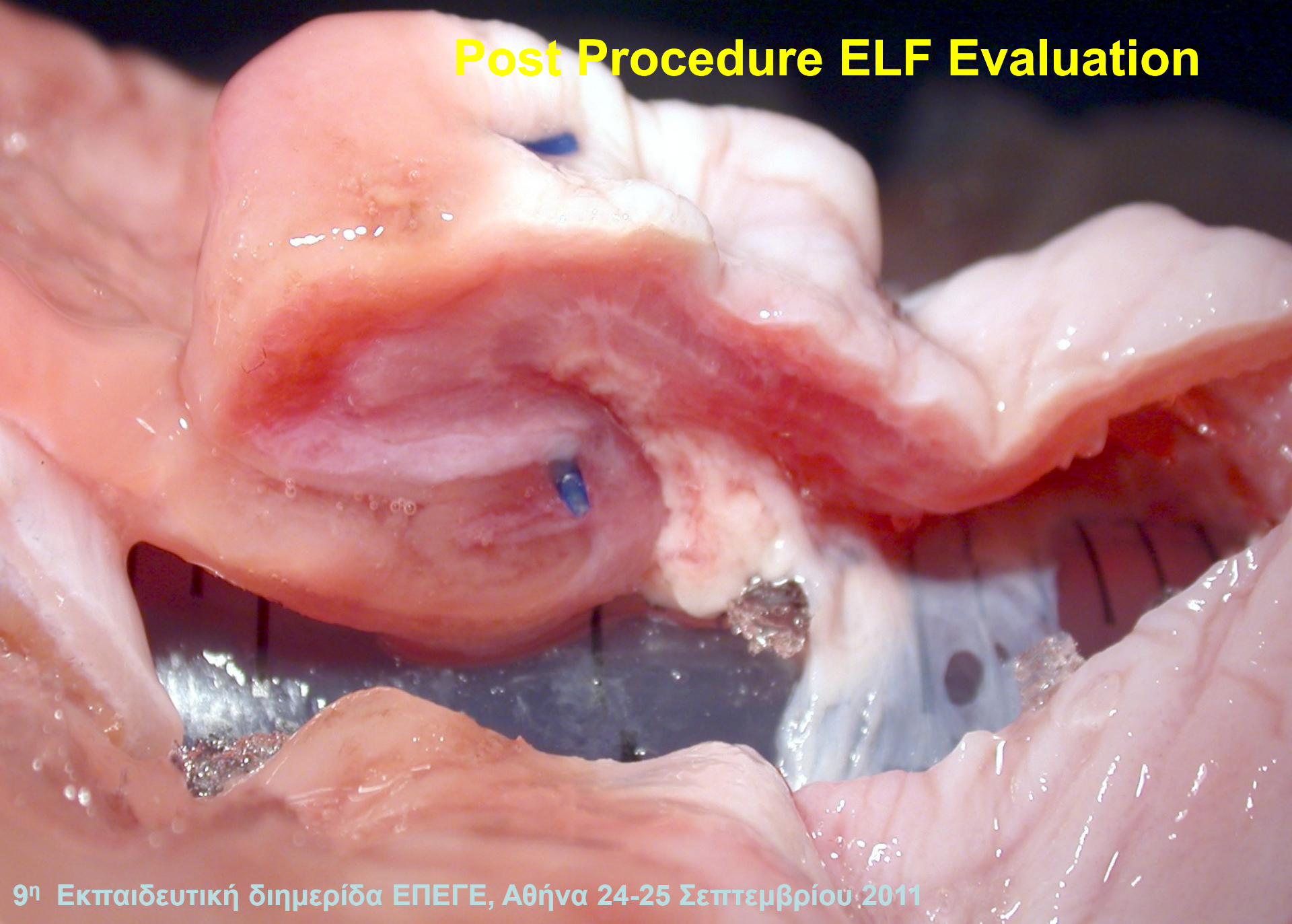






Mold and  
Fasten

## Post Procedure ELF Evaluation



# Post-Procedure Endoscopic Exam

valve 240-270°

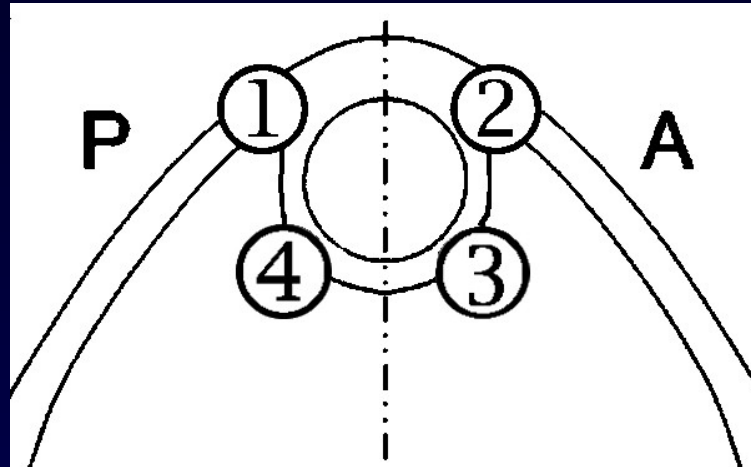
Ω shape

3-5 cm length



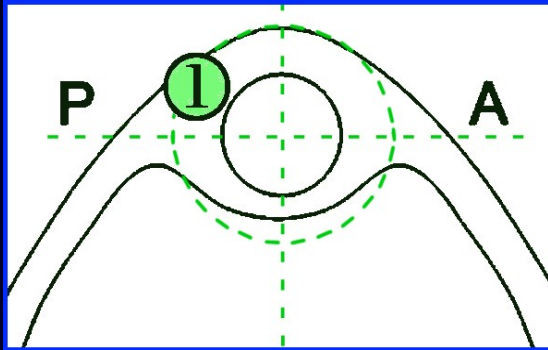


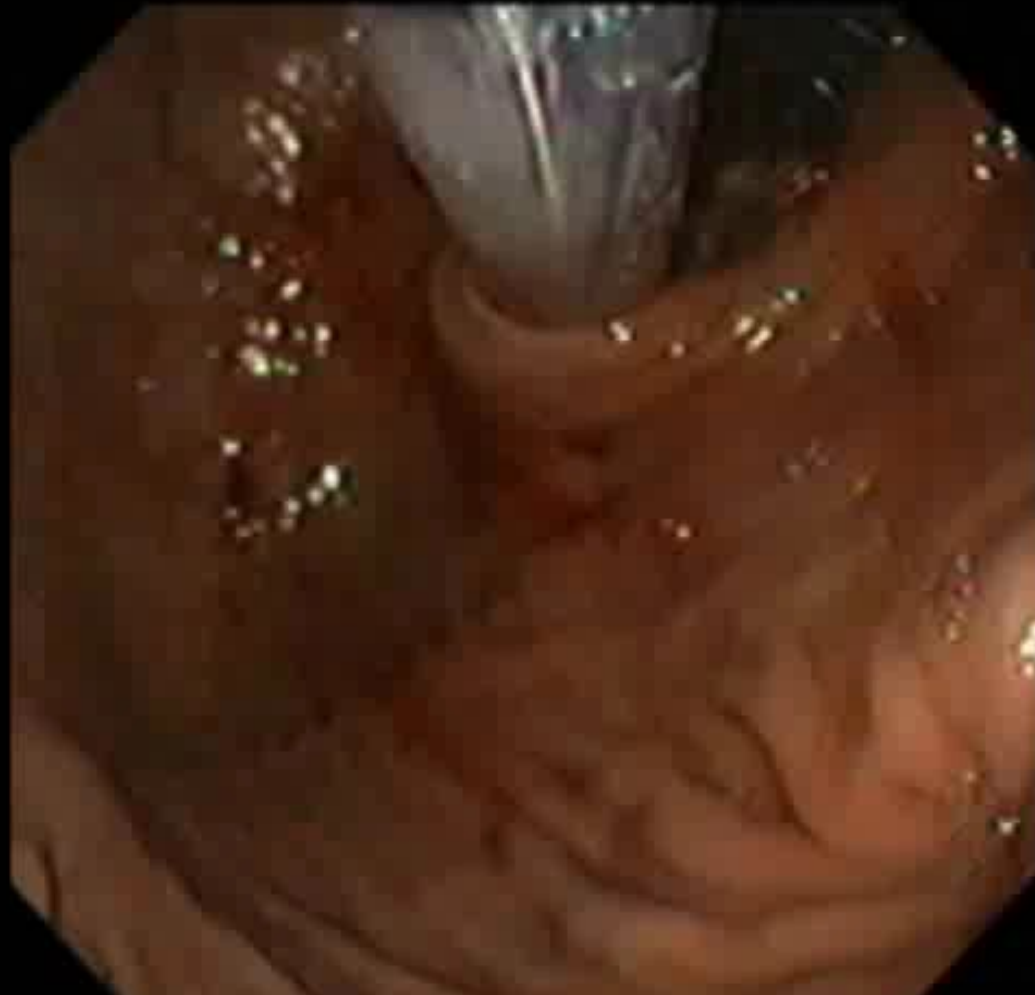
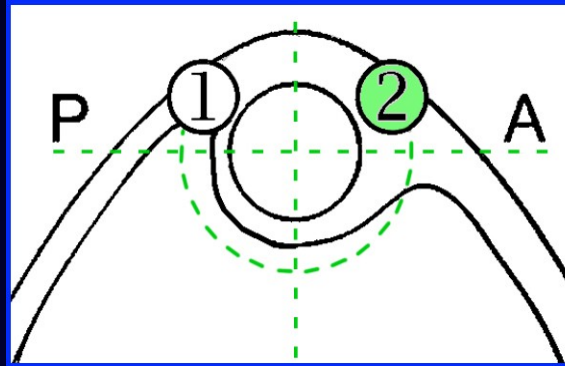
## TIF 2 Helix Engagement Sites

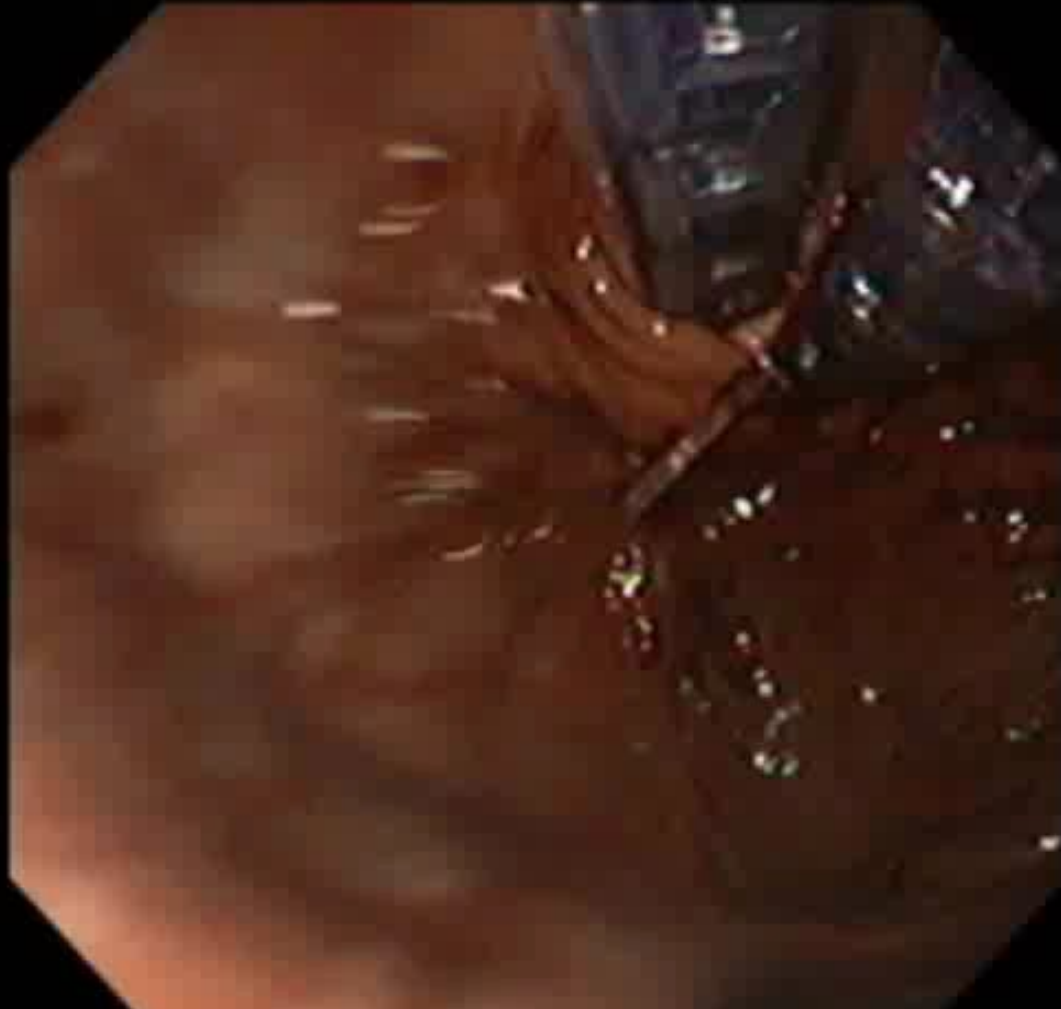
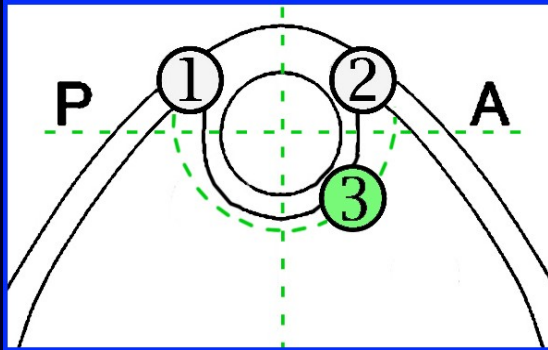


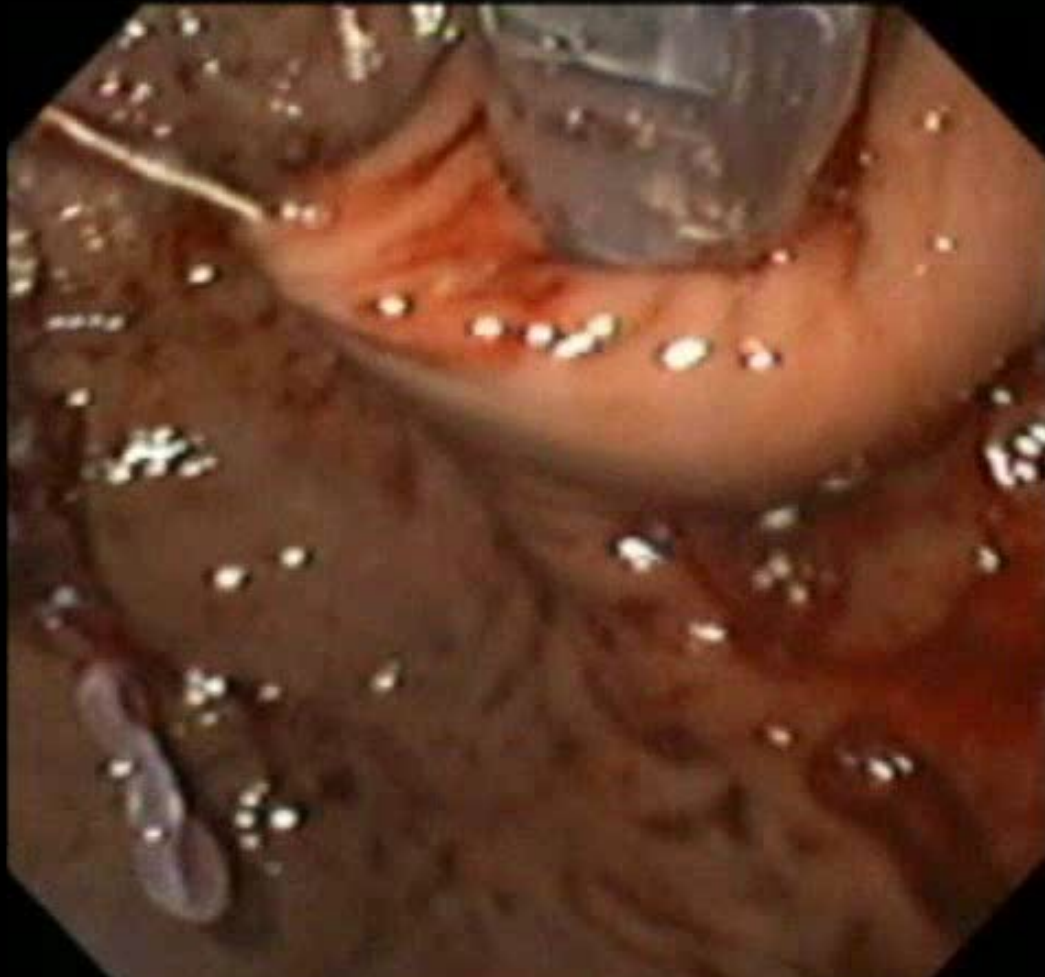
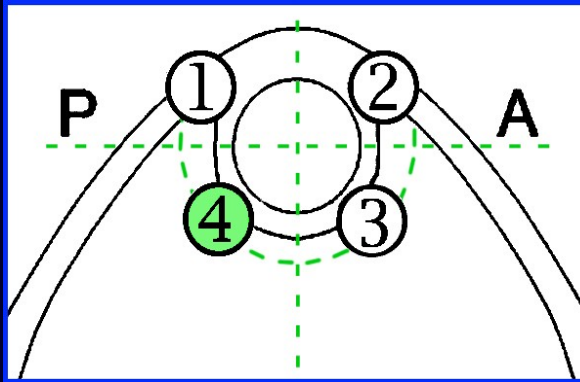
**Four fasteners are placed at sites 1 & 2**  
**Two fasteners are placed at sites 3 & 4**

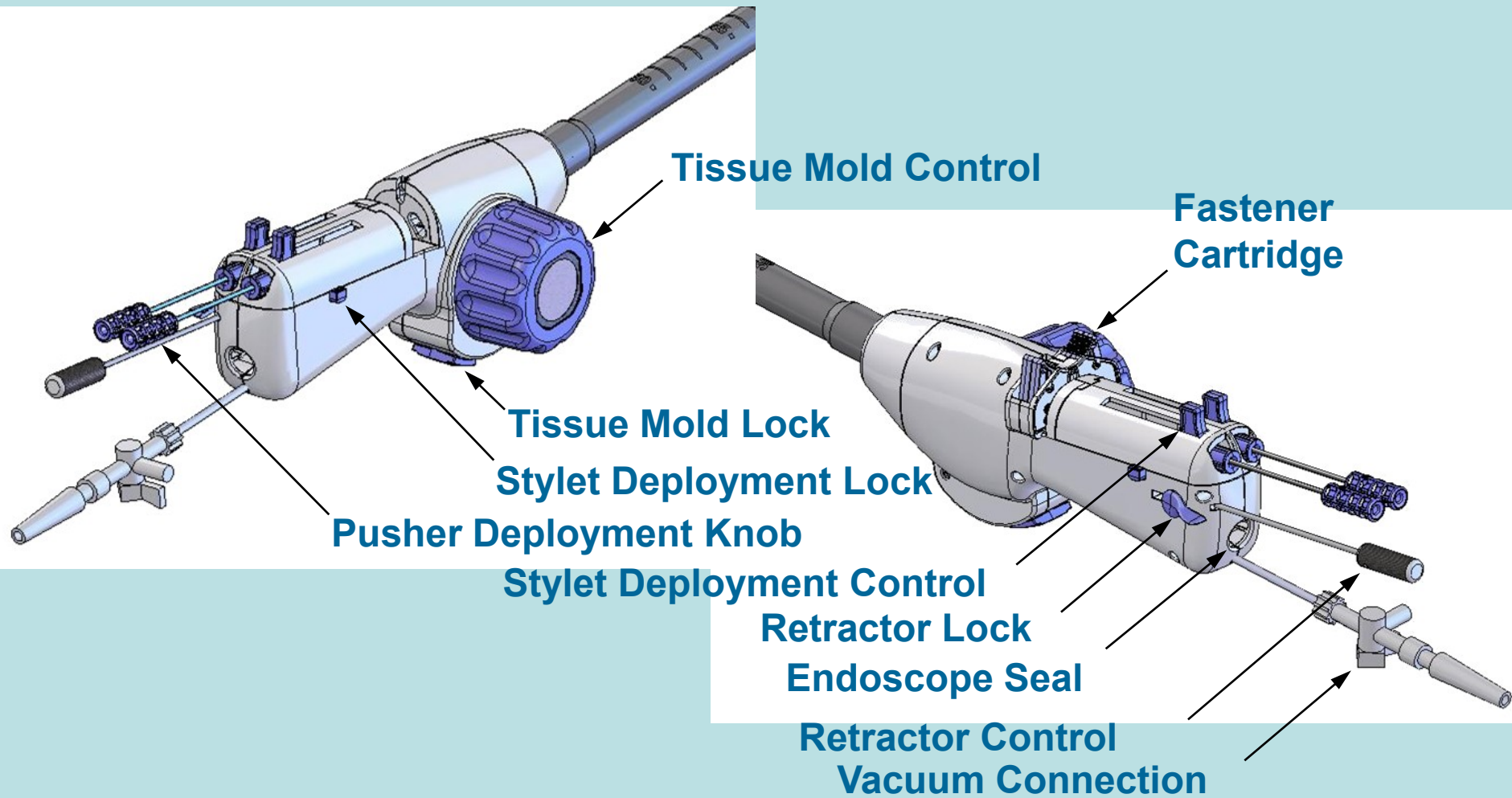
**Additional fasteners may be placed if desired**











the 12-month results showed that EsophyX-TIF **was safe and effective** in improving in chronic GERD patients:

- quality of life and for reducing symptoms
- PPI use
- hiatal hernia, and esophagitis, as well as
- increasing the LES resting pressure
- normalizing esophageal pH
- cardia circumference

*Cadiere GB, Buset M, Muls V, Raian A, Rosch T, Eckardt AJ, Weerts J, Bastens B, Costamagna G, Marchese M, Louis H, Mana F, Sermon F, Gawlicka AK, Daniel MA, Deviere J. Antireflux Transoral Incisionless Fundoplication Using EsophyX: 12-Month Results of a Prospective Multicenter Study. World J Surg. 2008 Apr 30*

The study demonstrated **technical feasibility and safety of the ELF procedure using the EsophyX device.**

The study also demonstrated **maintenance of the anatomical integrity of the ELF valves for 12 months** and provided preliminary data on ELF efficacy in reducing the symptoms and medication use associated with GERD

*Cadiere GB, Raian A, Germay O, Himpens J. Endoluminal fundoplication by a transoral device for the treatment of GERD: A feasibility study. Surg Endosc. 2008 Feb;22(2):333-42.*

**Bergman S, et al.** Endolumenal fundoplication with EsophyX: the initial North American experience. *Surg Innov.* 2008 Sep;15(3):166-70

**Cadière GB, Van Sante N, Graves JE, Gawlicka AK, Rajan A.**  
**Two-years results of a feasibility study on antireflux**  
**transoral incisionless fundoplication using EsophyX**

*Surg Endosc. 2009*

Demyttenaere SV, et al.

**Transoral incisionless fundoplication for gastroesophageal reflux disease in an unselected patient population.**

Surg Endosc. 2009 Sep 3

**93%** of patients reported a cessation of heartburn

**71%** of patients were completely off daily PPIs

**64%** of patients had a  $\geq 50\%$  improvement in HRQL

**79%** of patients experienced a complete cure or remission of their GERD

**86%** of patients were satisfied with TIF

**At 2 years no adverse events related to TIF were reported**

*Cadière GB, et al. Surg Endosc. 2009*

ID. No. :

Name :

Sex: Age:

D. O. Birth:

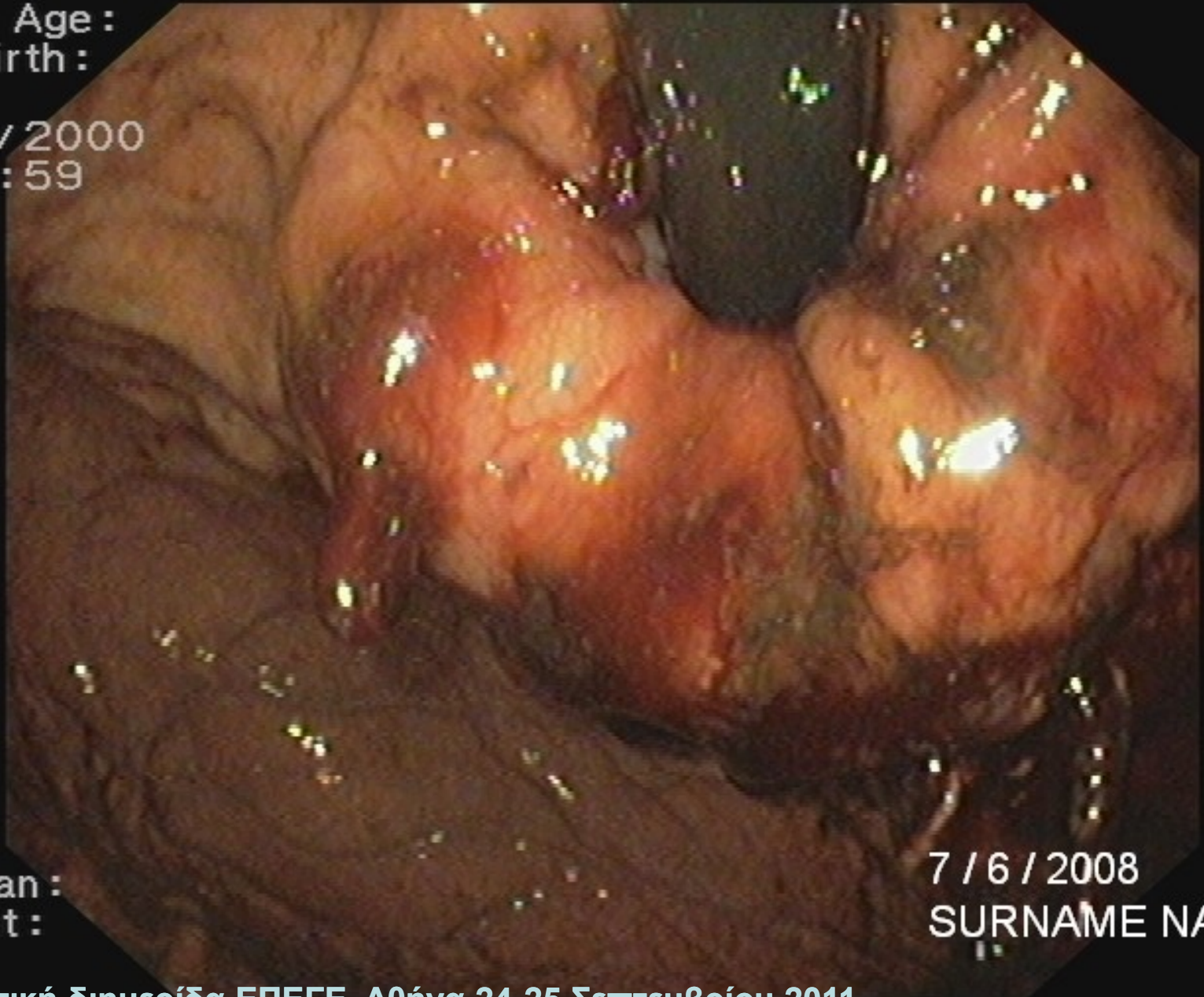
07/03/2000

04:37:59

CVP:5

D. F:

ΕΗ:Μ



Physician :

Comment :

7 / 6 / 2008

SURNAME NAME

ID. No. :

Name :

Sex: Age:

D. O. Birth:

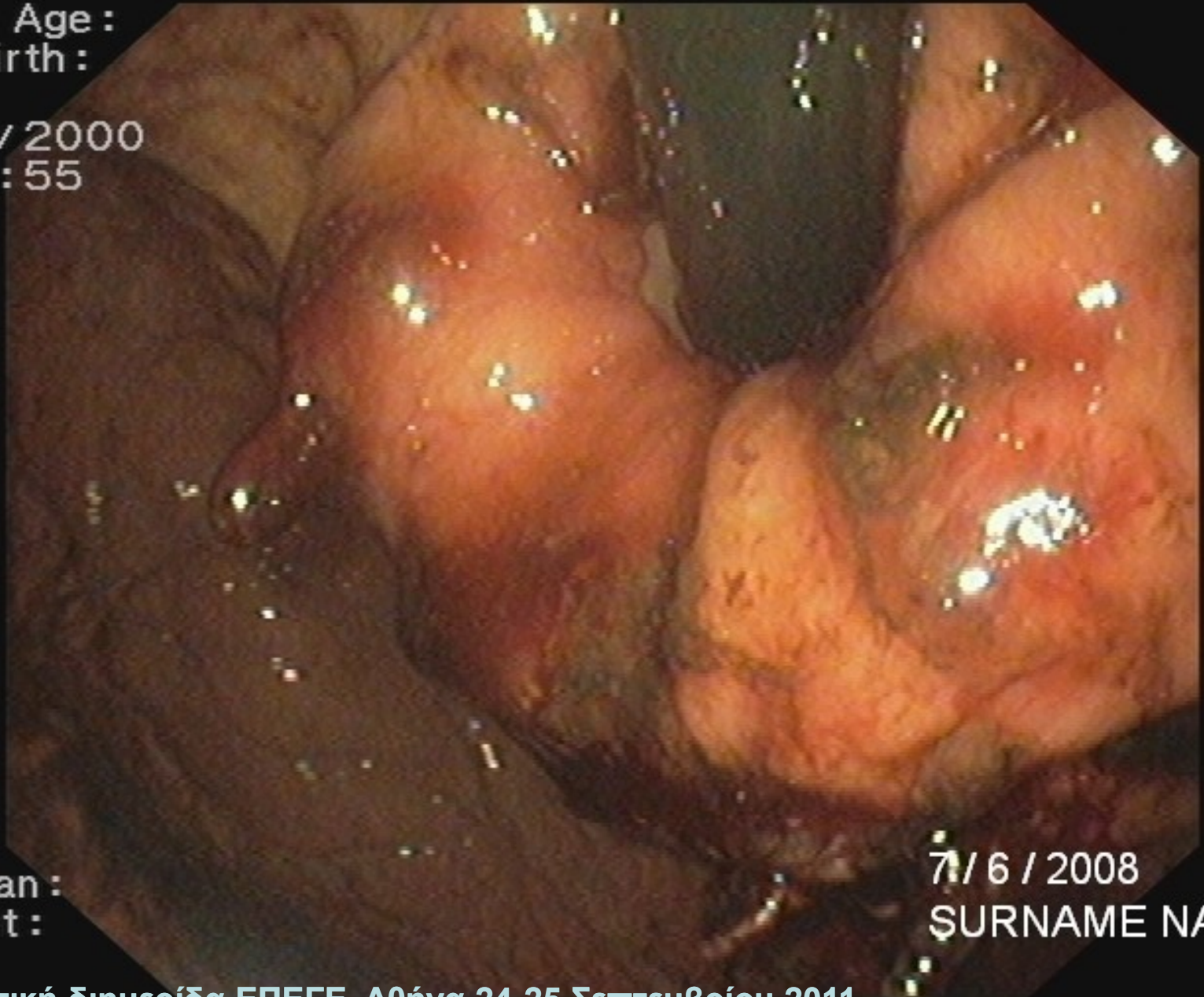
07/03/2000

04:37:55

CVP:4

D. F:

Eh:M



Physician :

Comment :

7/6/2008

SURNAME NAME

ID. No. :  
Sex: Age:  
D. O. Birth:

Name :

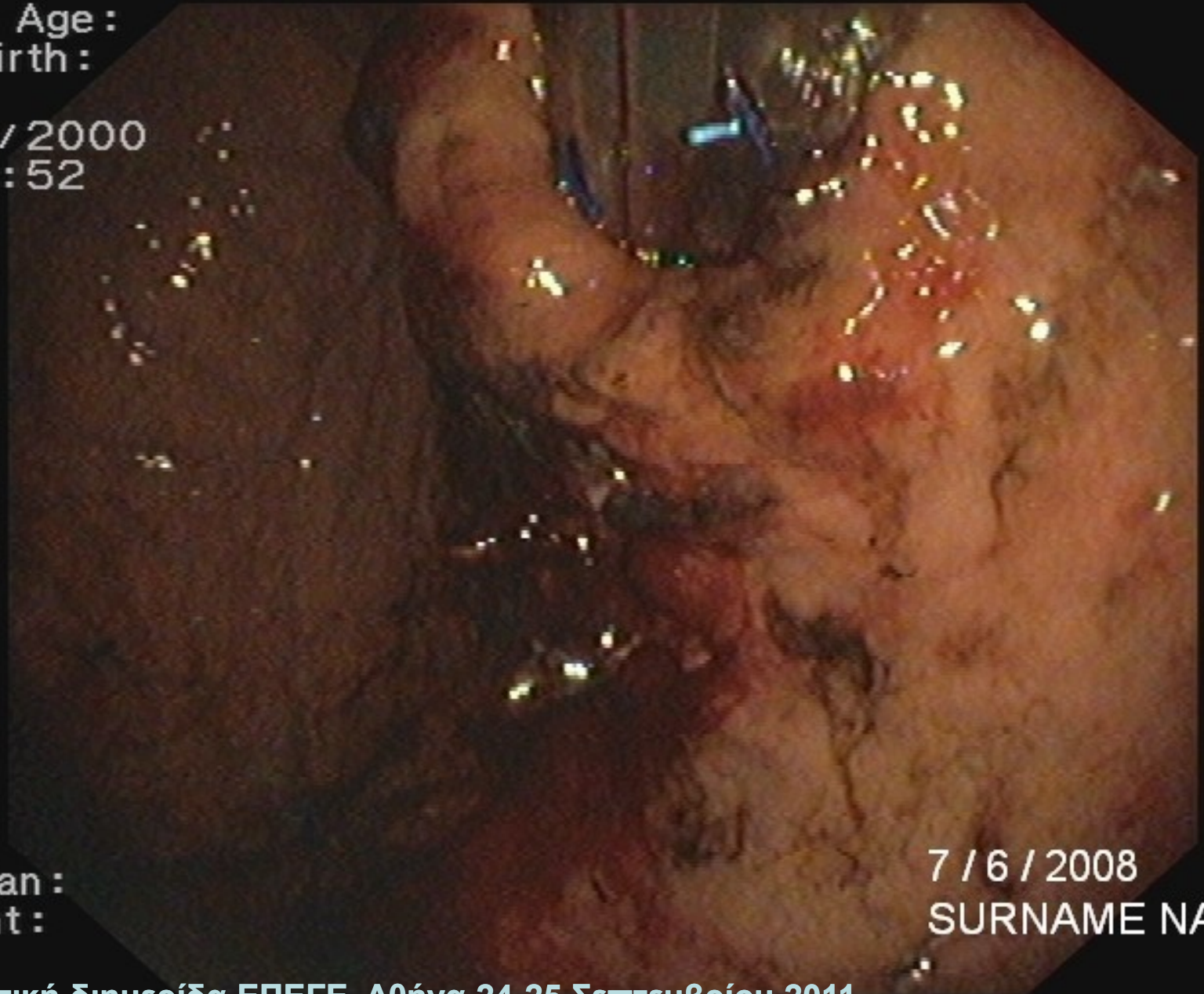
07/03/2000  
04:35:52

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D.F:  
Eh:M

Physician :  
Comment :

7 / 6 / 2008

SURNAME NAME

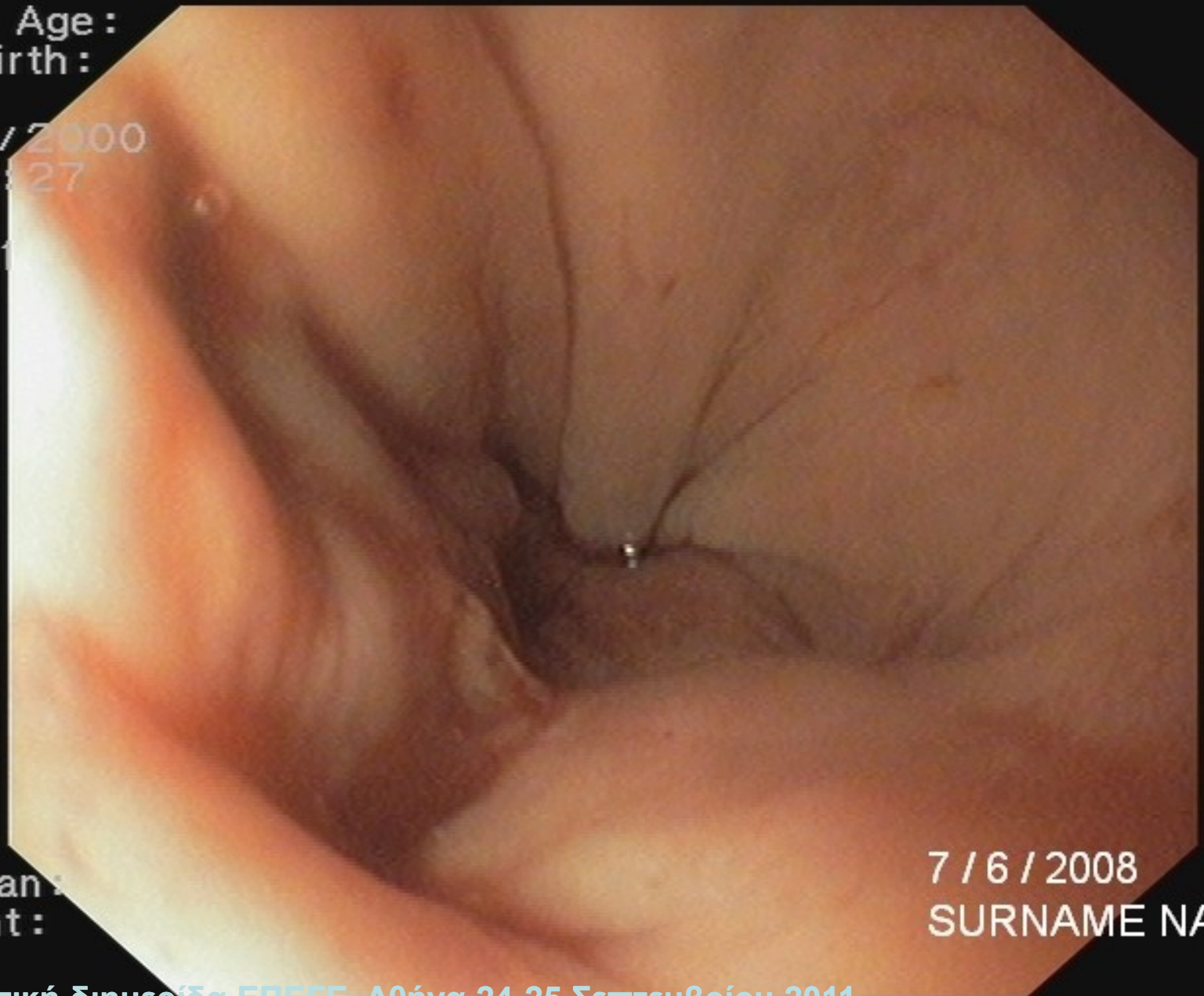


ID. No. :  
Sex: Age:  
D. O. Birth:

Name :

07/03/2000  
04:44:27

CVP: 11  
D. F:  
Eh:M



Physician:  
Comment:

7/6/2008

SURNAME NAME

ID. No. :

Name :

Sex: Age:

D. O. Birth:

07/03/2000

04:40:44

CVP: 7

D. F:

ΕΗ:Μ

Physician:

Comment:

7 / 6 / 2008

SURNAME NAME

Sex: Age:  
D. O. Birth:

02/12/2000  
07:42:10

CVP:2  
D.F:  
Eh:H

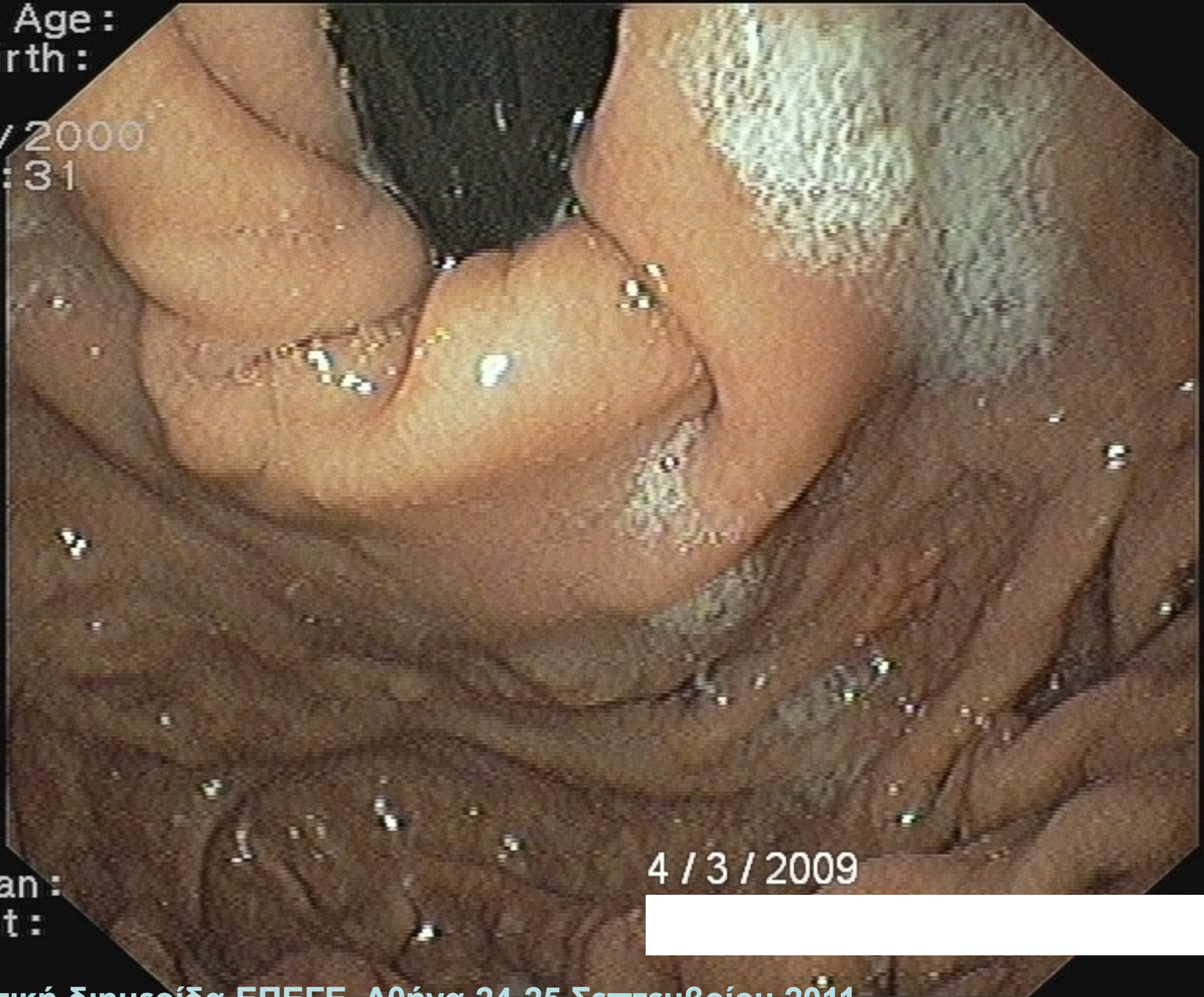
Physician:  
Comment:

4 / 3 / 2009

Sex: Age:  
D. O. Birth:

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07:42:31

CVP:4  
D.F:  
Eh:H



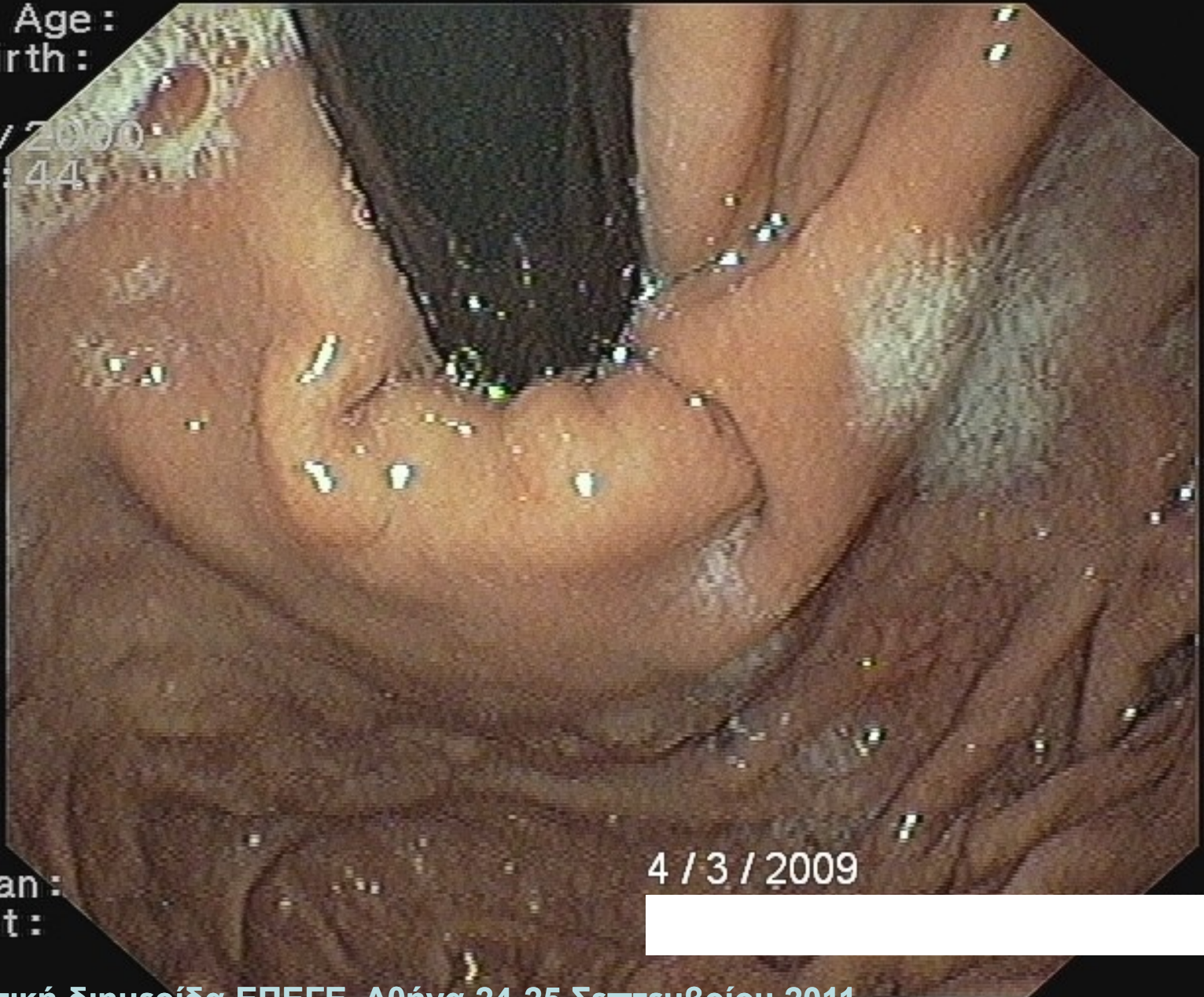
Physician:  
Comment:

4 / 3 / 2009

Sex: Age:  
D. O. Birth:

02/12/2000  
07:42:44

CVP:5  
D.F:  
Eh:H



Physician:  
Comment:

4 / 3 / 2009

## αντενδείξεις

- BMI > 35
- κίρσοι οισοφάγου
- επιπλοκές οισοφαγίτιδας
- κινητικές διαταραχές οισοφάγου
- ολισθαίνουσα διαφραγματοκήλη > 2-3 cm
- Barrett ;
- ηλικία < 18 ;

## ΓΑΣΤΡΕΝΤΕΡΟΛΟΓΙΚΗ ΚΛΙΝΙΚΗ ΝΝΑ

Νοέμβριος 2007 – Σεπτέμβριος 2010

αποτελέσματα από 43 ασθενείς

26 με  $f/u \geq 12$  μηνών

- 25 → αναφέρουν βελτίωση
- 19 → βελτιωμένη pH μετρία
- 12 → φυσιολογική pH μετρία
- 14 → πλήρης διακοπή PPIs
- 8 → λήψη PPIs 1-4 ανά μήνα
- 3 → ανά 2 ημέρες
- 2 → με οισοφαγίτιδα

## ΣΥΜΠΕΡΑΣΜΑΤΙΚΑ

- ασφαλής και αποτελεσματική μέθοδος
  - γενική αναισθησία με διαρινική διασωλήνωση
  - σημαντικής διάρκειας καμπύλη εκμάθησης
- 

### προσεκτική επιλογή ασθενών

- α. νέοι σχετικά ασθενείς που επιθυμούν να διακόψουν-περιορίσουν τη λήψη PPIs
- β. εξωοισοφαγικές εκδηλώσεις-επιπλοκές

## υπάρχει σύγκριση με την λαπαροσκοπική Nissen;

η ενδοσκοπική θολοπλαστική μειονεκτεί έναντι της λαπαροσκοπικής Nissen σε άριστο αποτέλεσμα κατά 20% περίπου

### γιατί να προτιμήσω το esophyx;

- αθροιστικά άριστο και αρκετά καλό αποτέλεσμα σε περισσότερο από 85% των ασθενών
- λιγότερη επεμβατική προσέγγιση
- λιγότερες επιπλοκές
- επαναλήψιμη
- μπορεί να προληφθεί ο Barrett σε νέο ασθενή;

ευχαριστώ πολύ  
για την προσοχή σας





9<sup>η</sup> Εκπαιδευτική διημερίδα ΕΠΕΓΕ, Αθήνα 24-25 Σεπτεμβρίου 2011

