



Joint Meeting AIGO-SIED-SIGE-GISMAD
LA DISFAGIA : DALLE BASI MOLECOLARI ALLA TERAPIA

TRATTAMENTO CONSERVATIVO

Milano, 30 marzo 2009

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OSPEDALE MAGGIORE POLICLINICO, MANGIAGALLI E REGINA ELENA

Fondazione IRCCS - Istituto di Ricovero e Cura a Carattere Scientifico di natura pubblica

ACHALASIA: NON-SURGICAL TREATMENT

- **Pharmacological treatment**
- **Botulinum toxin**
- **Pneumatic dilatation**

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ACHALASIA: NON-SURGICAL TREATMENT

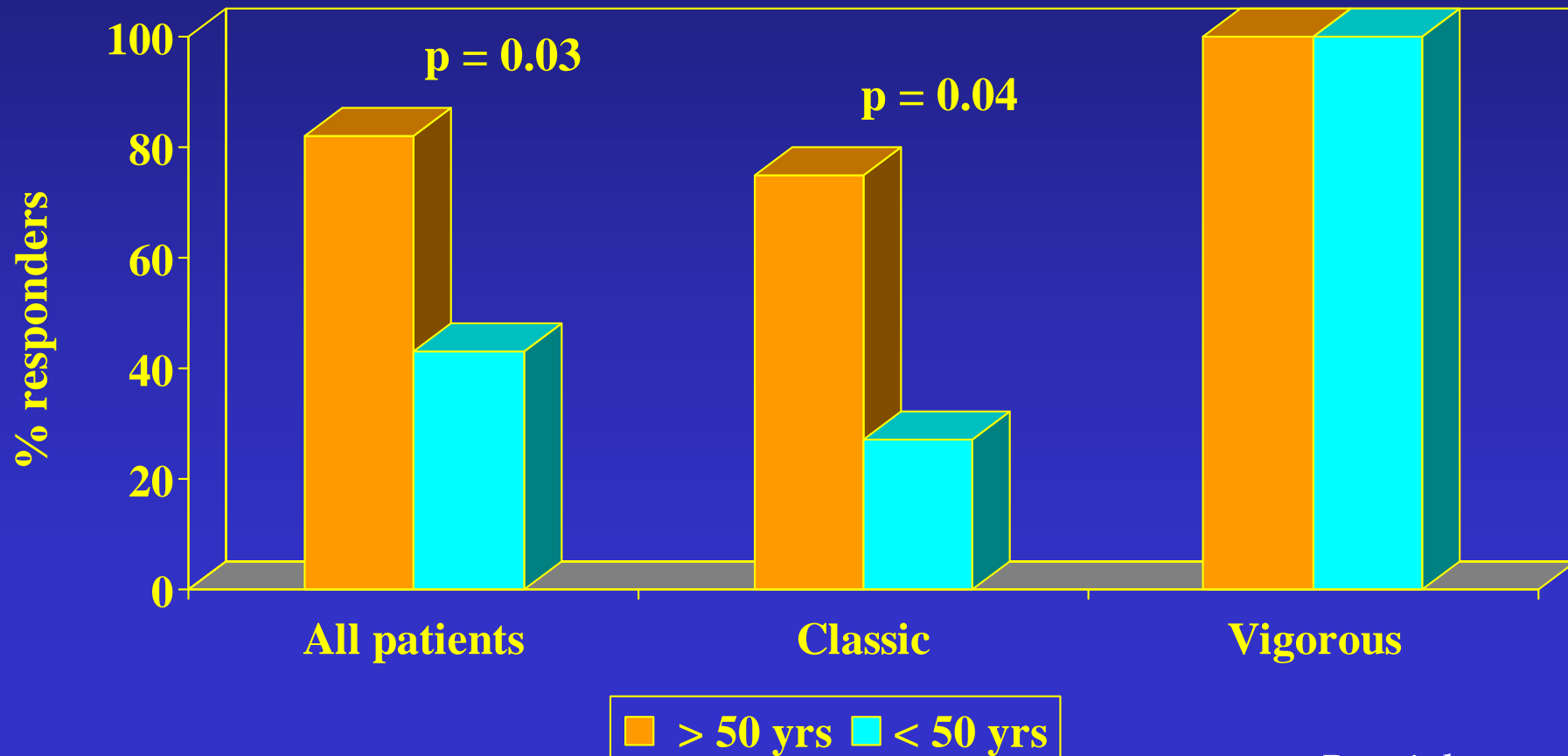
- Pharmacological treatment
- Botulinum toxin (Botox)
- Pneumatic dilatation (PD)

One-fifth of the patients require a combination of at least 2 of the 3 main treatment modalities: Botox, PD and Heller myotomy

Vela et al, 2004; Bravi et al, UEGW 2008

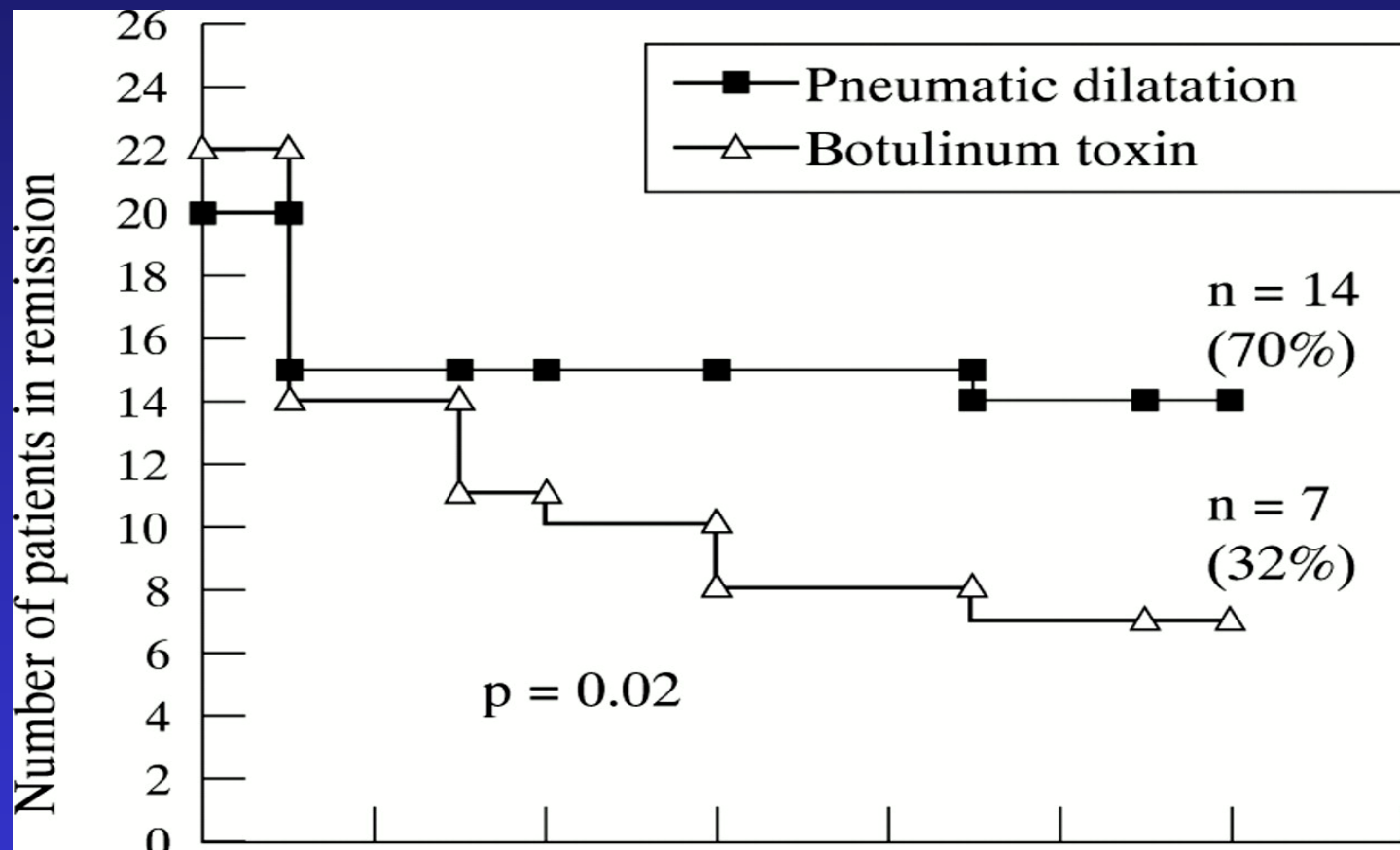
BOTULINUM TOXIN (1-2 injections at 6 mo f-up): PREDICTORS OF RESPONSE

64% of patients in remission at 6 mo



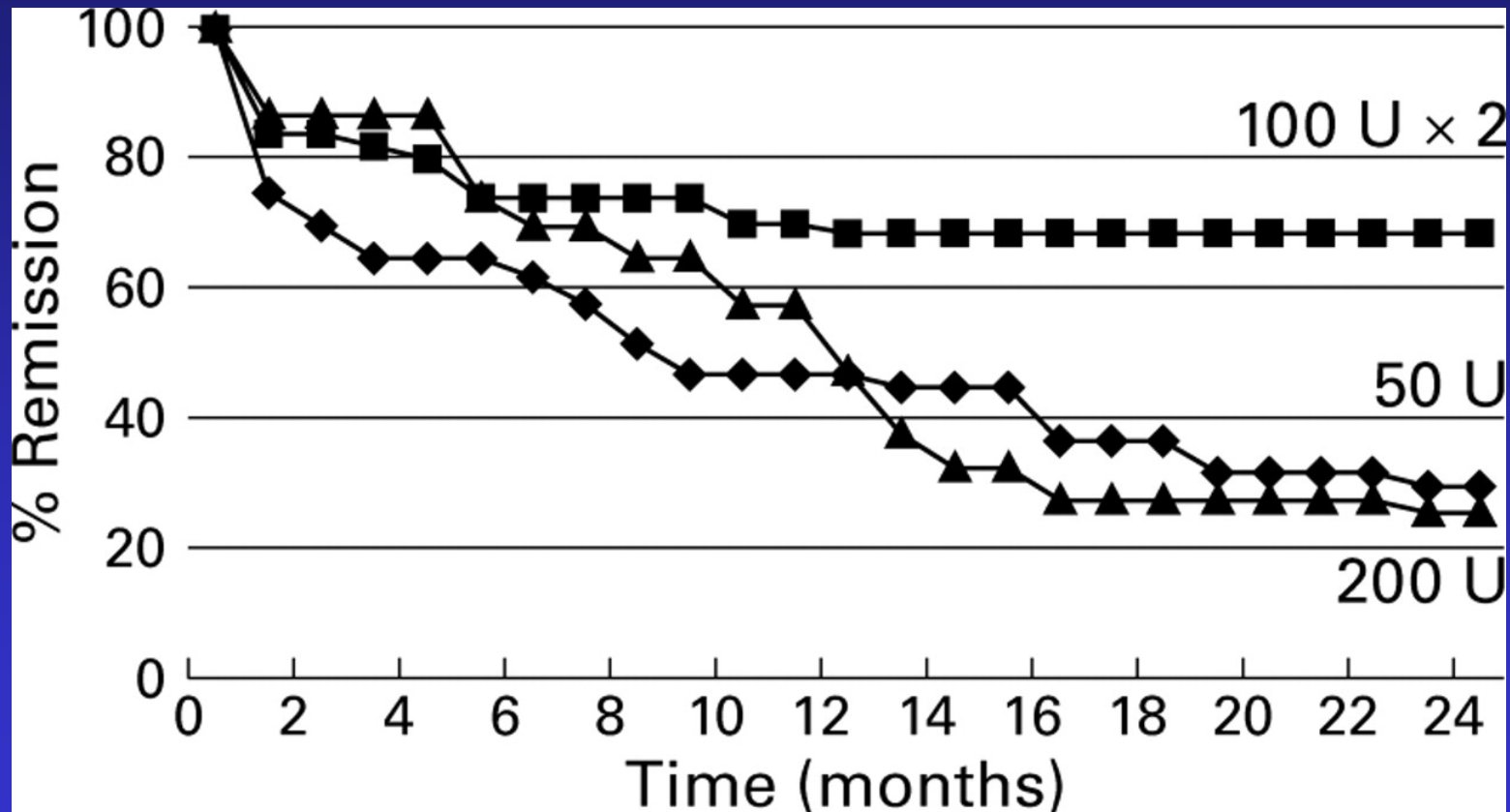
1-2 BOTOX INJECTIONS VS 1-2 PNEUMATIC DILATATIONS

Vaezi et al, 1999



Botox injection is generally reserved for pts who are not candidate for more invasive treatment

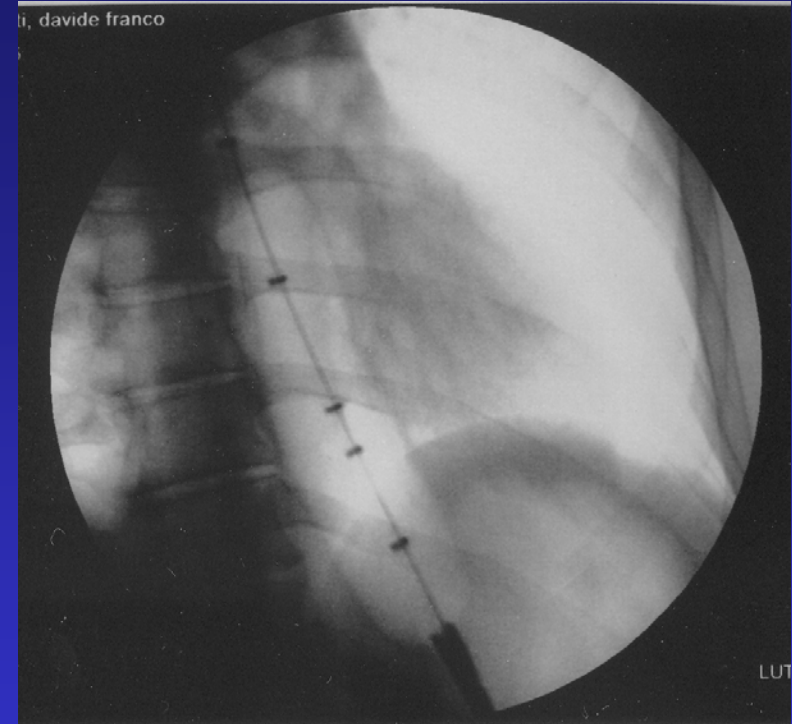
BOTULINUM TOXIN: USEFULNESS OF 2 INJECTIONS 30 DAYS APART



USE OF BOTOX AS A DIAGNOSTIC/THERAPEUTIC TRAIL

- **Pts with symptoms consistent with achalasia but insufficient manometric criteria to make the diagnosis**
- **Complex clinical situations in which the contribution of achalasia to symptoms is unclear**
- **Advanced achalasia in which it is unclear that sphincter-directed therapy would be of benefit**

PNEUMATIC DILATATION



10-12 psi

Vakil et al, Consensus report on the procedure. Endoscopy 2003;35:526-530

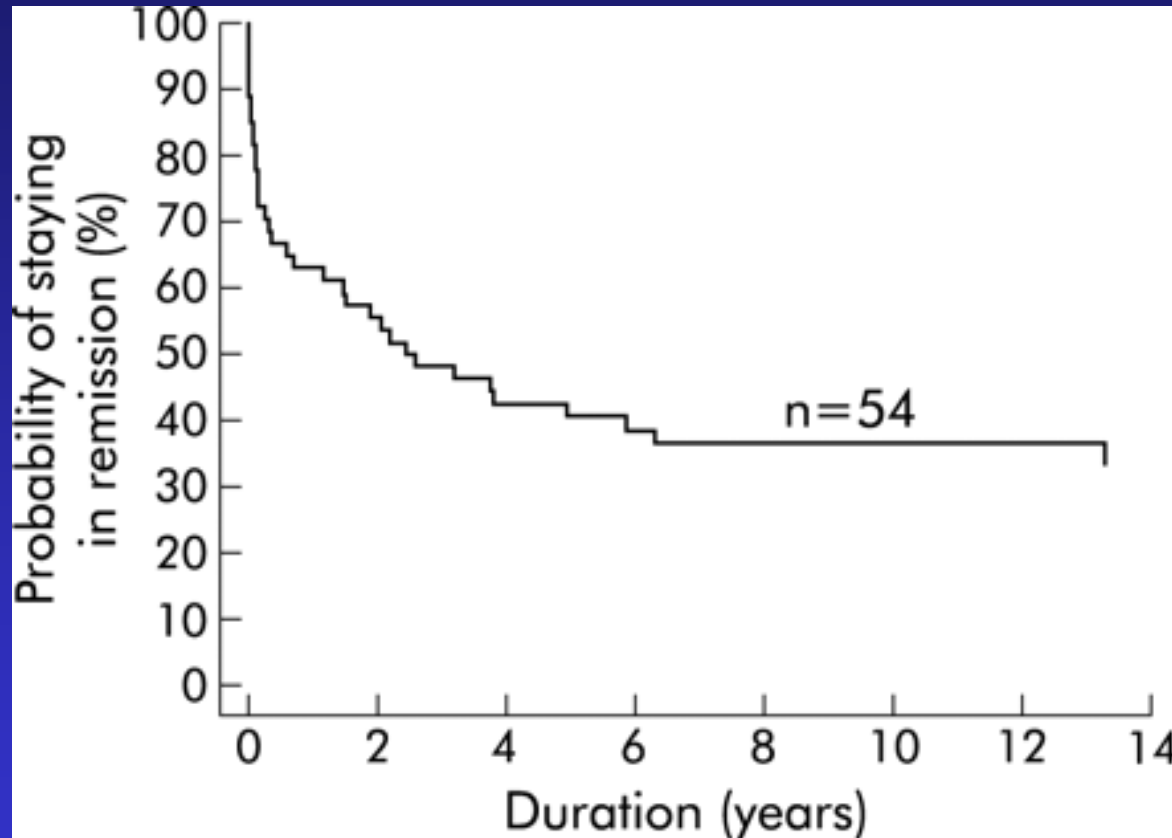
Perforation: 7/345 patients (2 %)

Vaezi et al, 1998

PNEUMATIC DILATATION LONG TERM STUDIES

**Variability in dilator type, distension protocol and
follow-up strategy**

PROBABILITY TO REMAIN IN REMISSION AFTER THE FIRST PD (Browne-McHardy; no sedation)

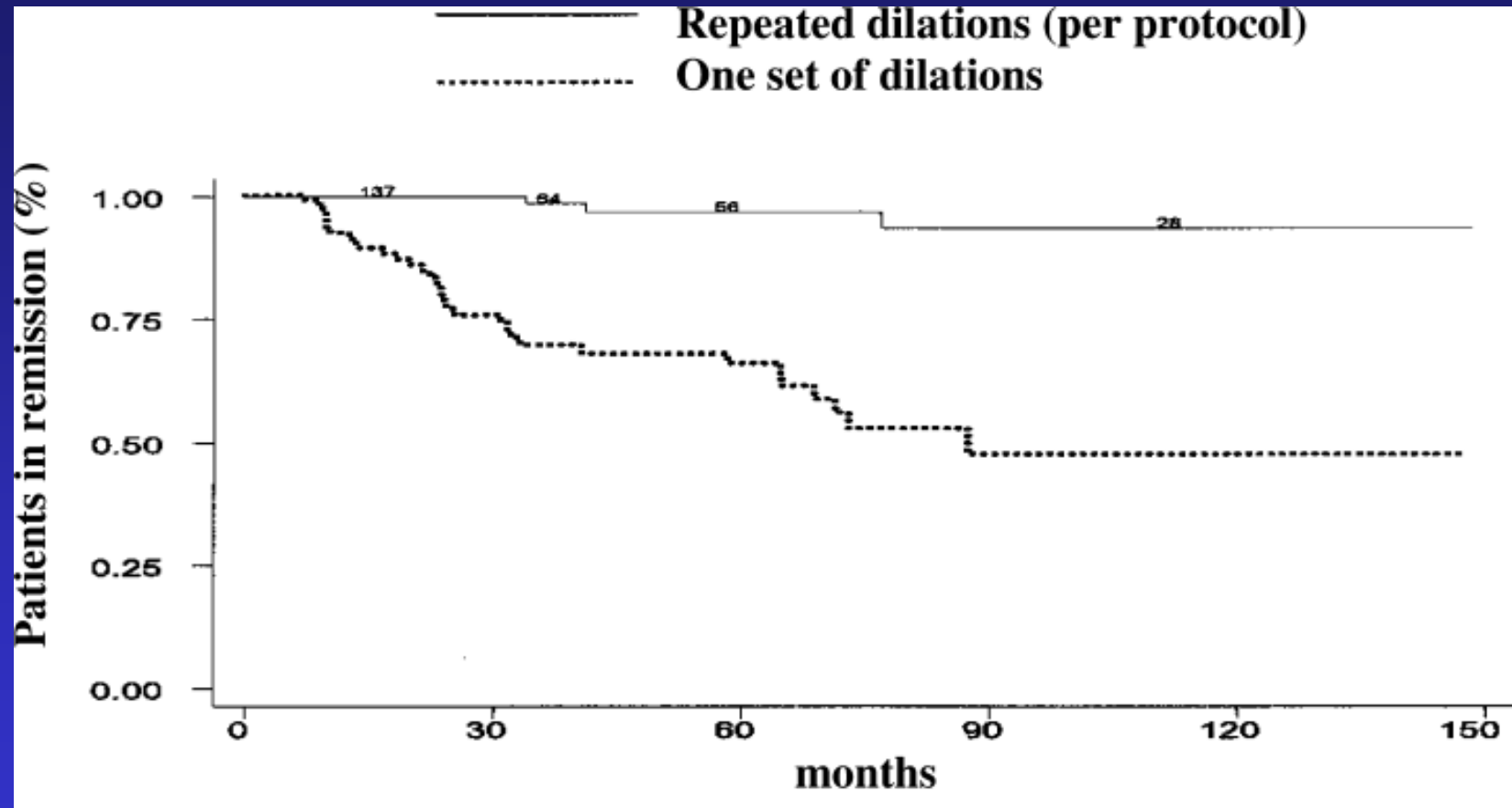


Eckardt et al, 2004

Repeated PDs only mildly improved the clinical response of patients who relapsed after the 1st PD

PROBABILITY TO REMAIN IN REMISSION (Rigiflex; yes sedation)

Zerbib et al, 2006

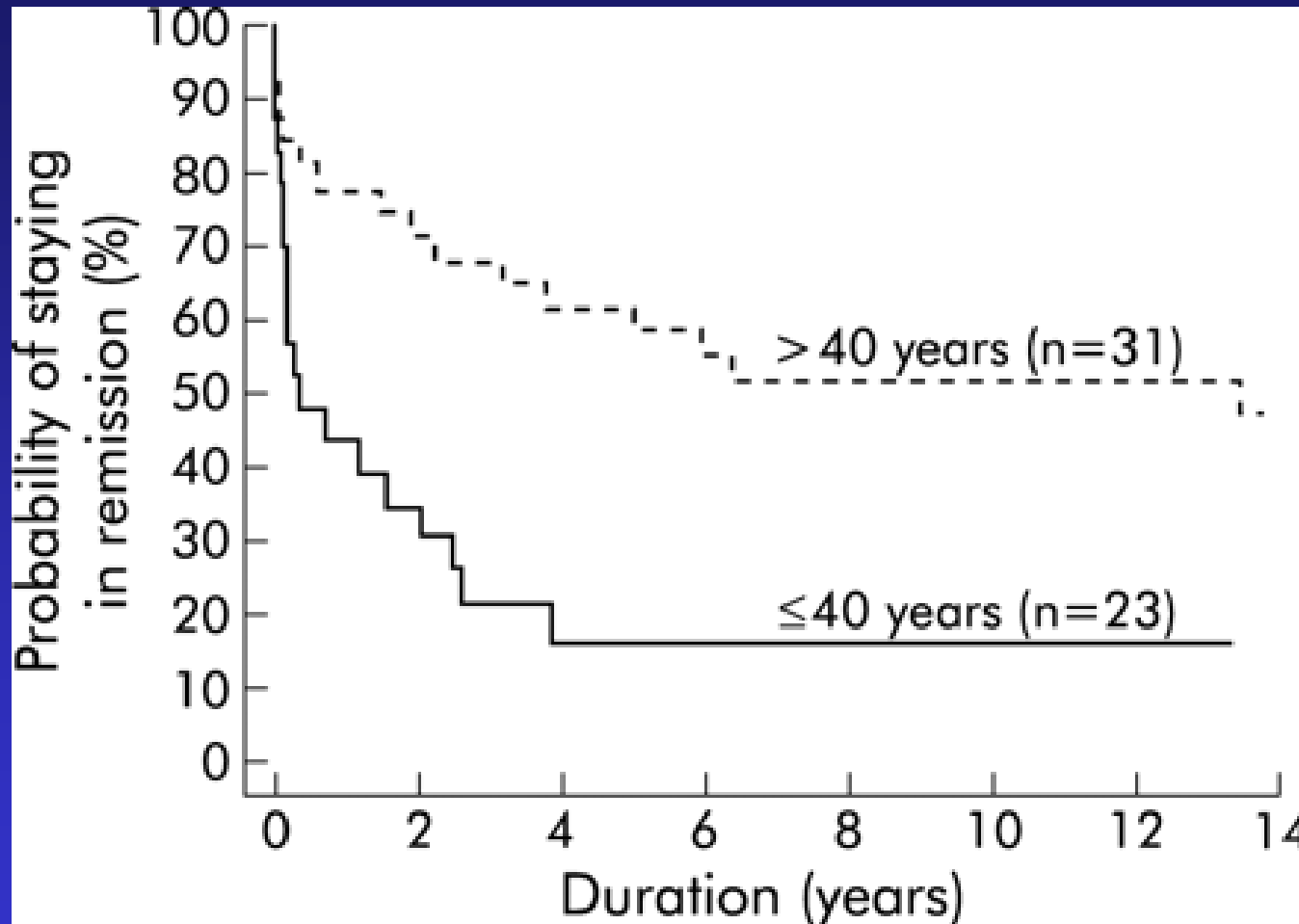


82% probability to remain in remission at 6 yrs after 1st set of PDs

Bravi et al, UEGW 2008

PROBABILITY TO REMAIN IN REMISSION: EFFECT OF AGE

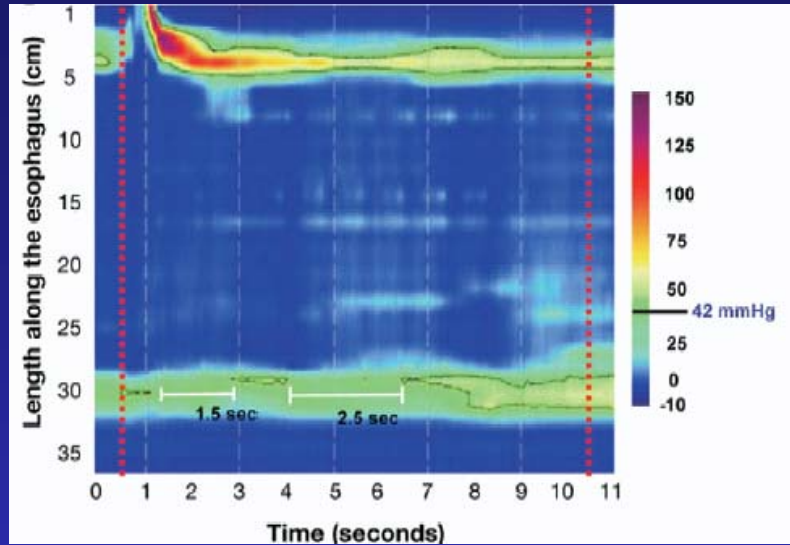
Eckardt et al, 2004



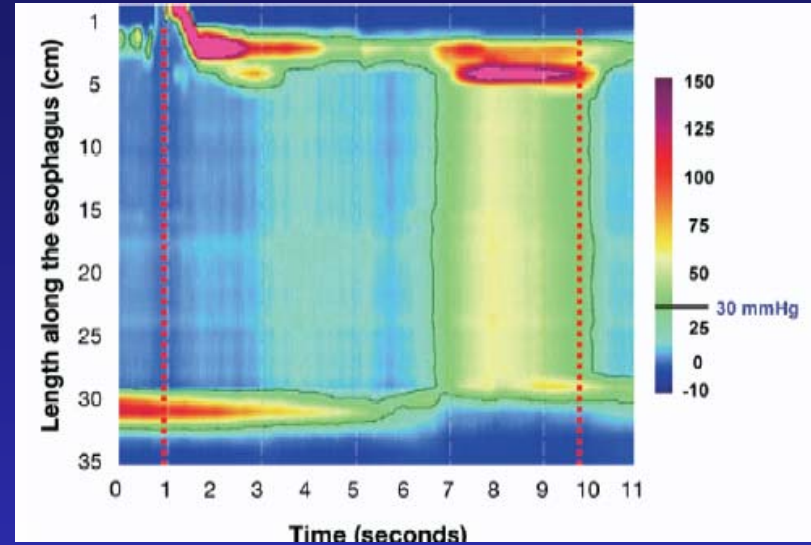
Other studies did not find age as an independent factor

Ghoshal et al, 2004; Zerbib et al, 2006; Bravi et al, UEGW 2008

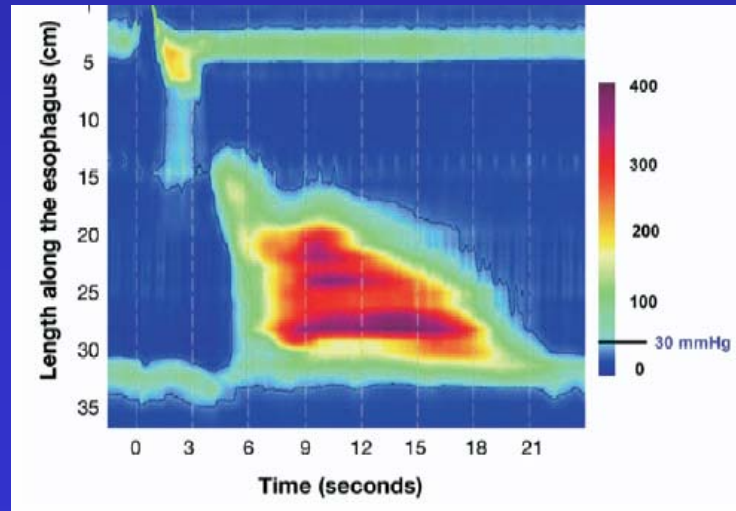
PRESSURE PATTERN AT HIGH RESOLUTION MANOMETRY AND RESPONSIVENESS TO TREATMENT



Minimal esophageal pressurization

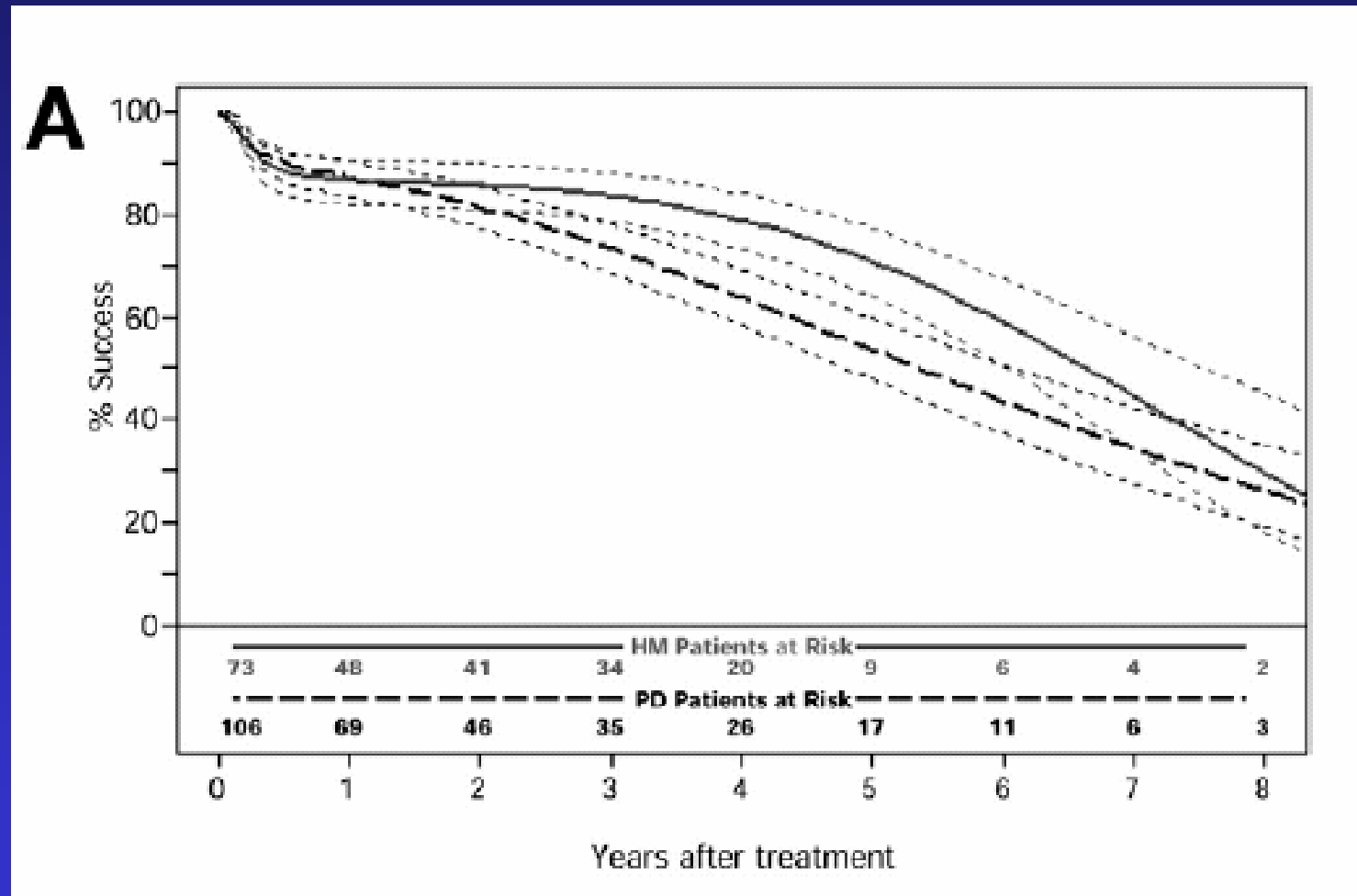


Oesophageal pressurization (60 mmHg)



Spastic contractions

LONG-TERM SUCCESS OF GRADED PDs (1 to 3) AND LAPAROSCOPIC HELLER MYOTOMY



HOW TO FOLLOW PATIENTS UP AFTER PD?

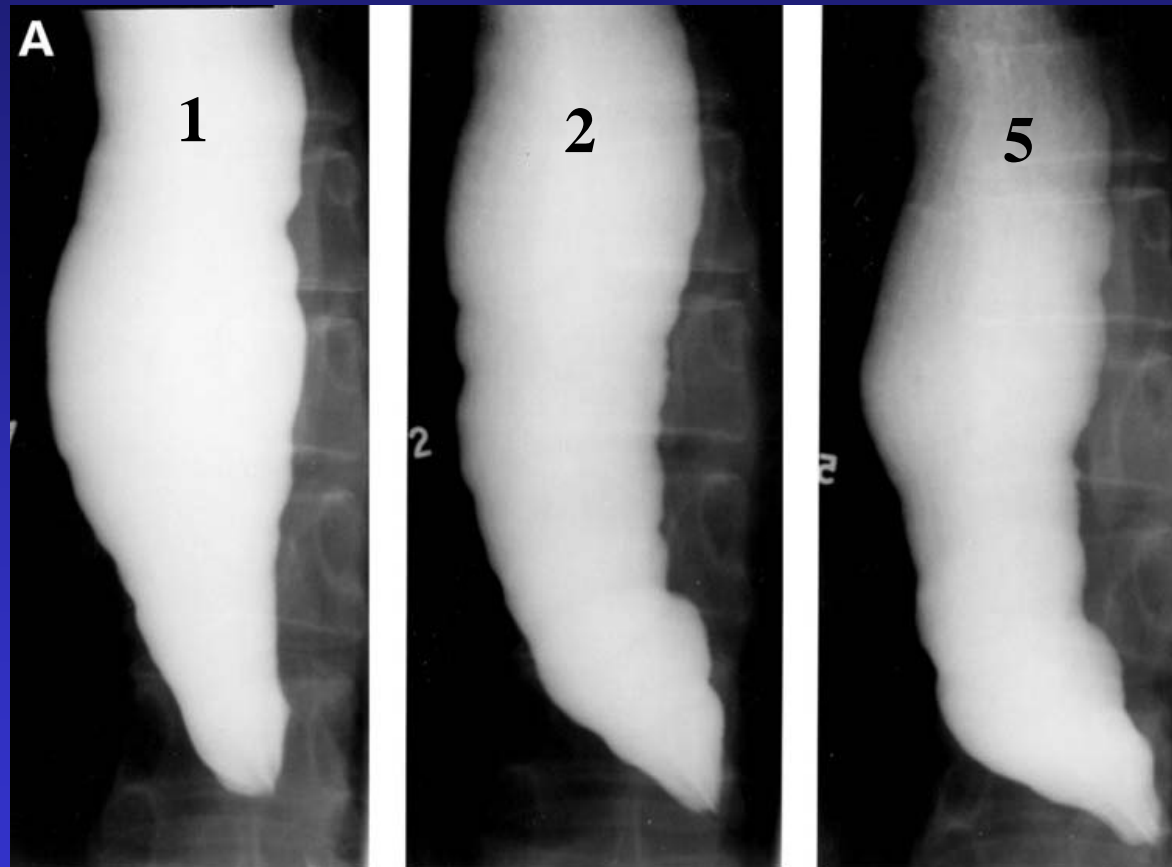
- **Visit on demand**
- **Visit at standardized intervals**

HOW TO EVALUATE REMISSION AFTER PD?

- **Clinical evaluation only**
- **Clinical evaluation and barium oesophagram**
- **Clinical evaluation and oesophageal manometry**
- **Clinical evaluation and oesophagram + manometry**

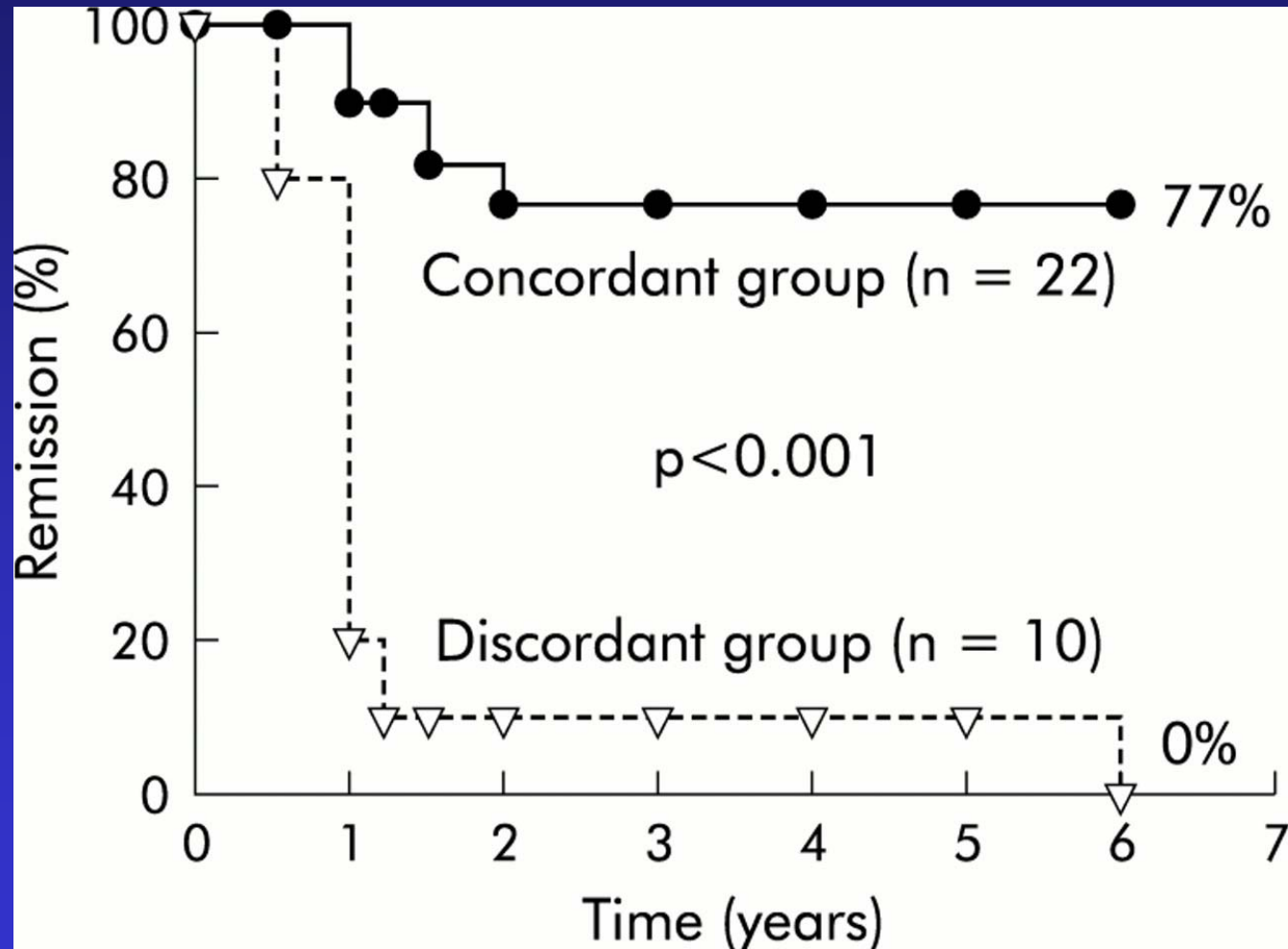
OESOPHAGEAL EMPTYING AT TIMED BARIUM OESOPHAGRAM AFTER PD AS A PREDICTOR OF REMISSION

Vaezi et al, 2002

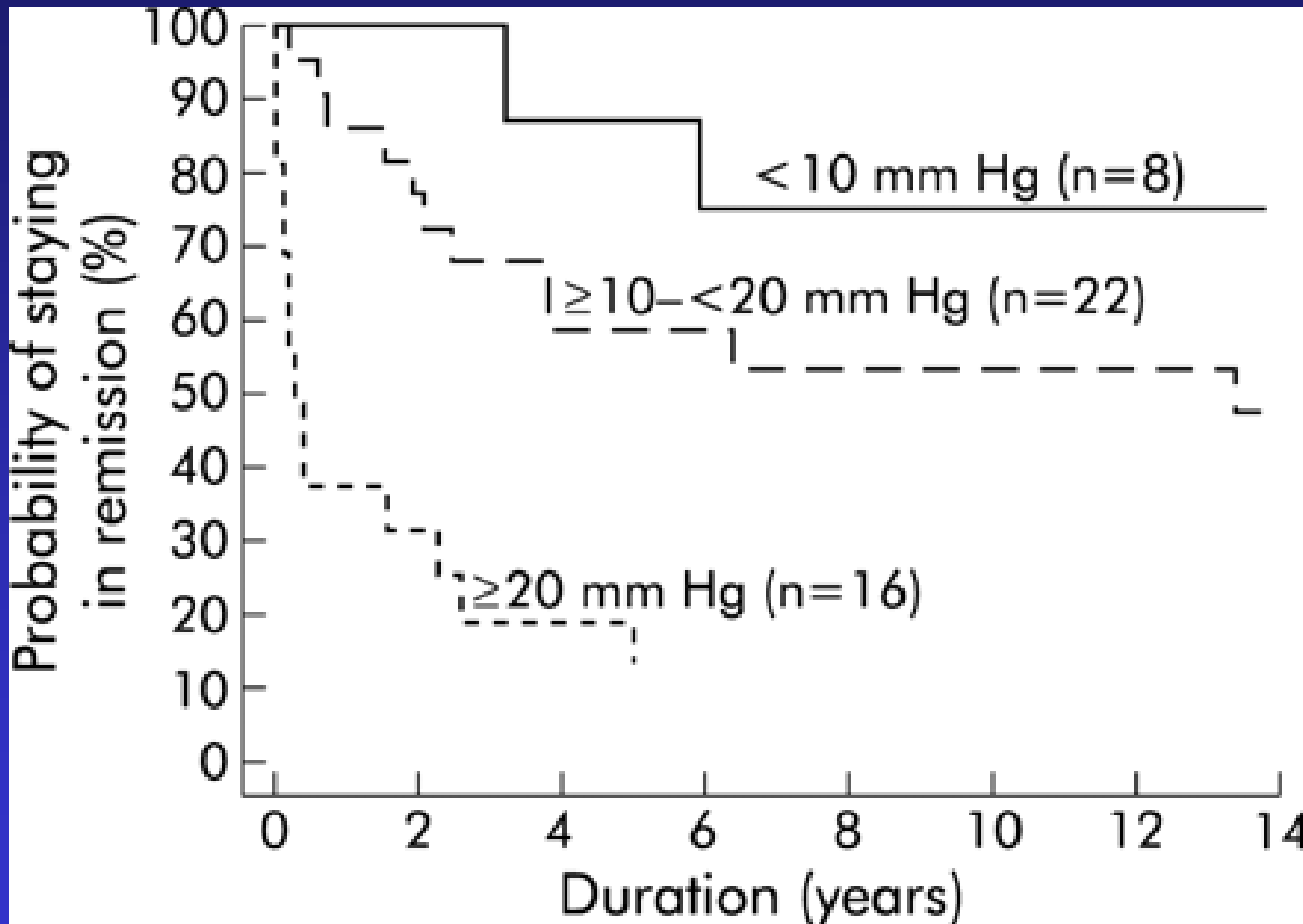


Barium height at 5 minutes as a measure of emptying

CONCORDANCE BETWEEN SYMPTOMS AND OESOPHAGEAL EMPTYING AND PROBABILITY OF REMISSION AFTER PD

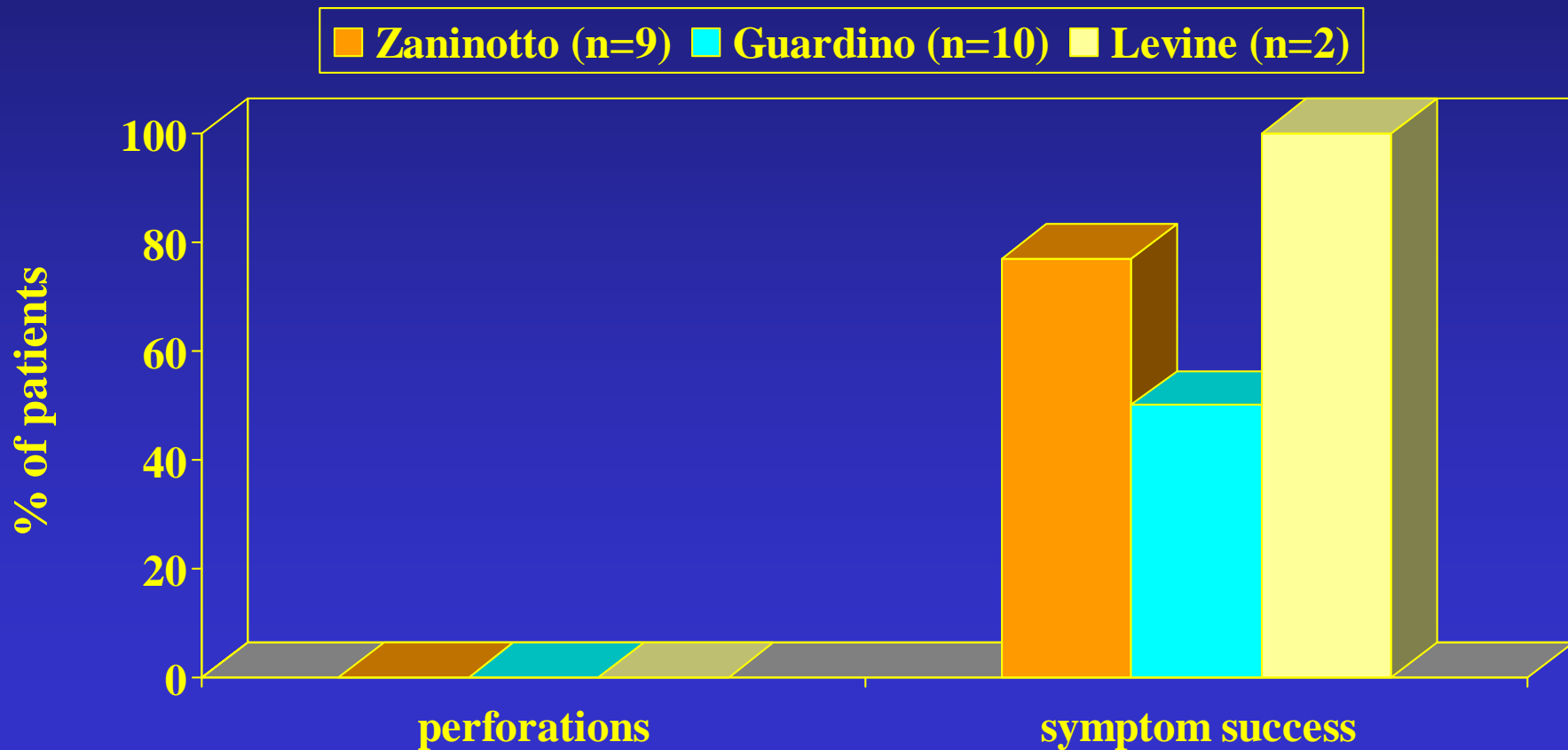


LOW POST-DILATATION LOWER OESOPHAGEAL SPHINCTER PRESSURE AS A PREDICTOR OF REMISSION



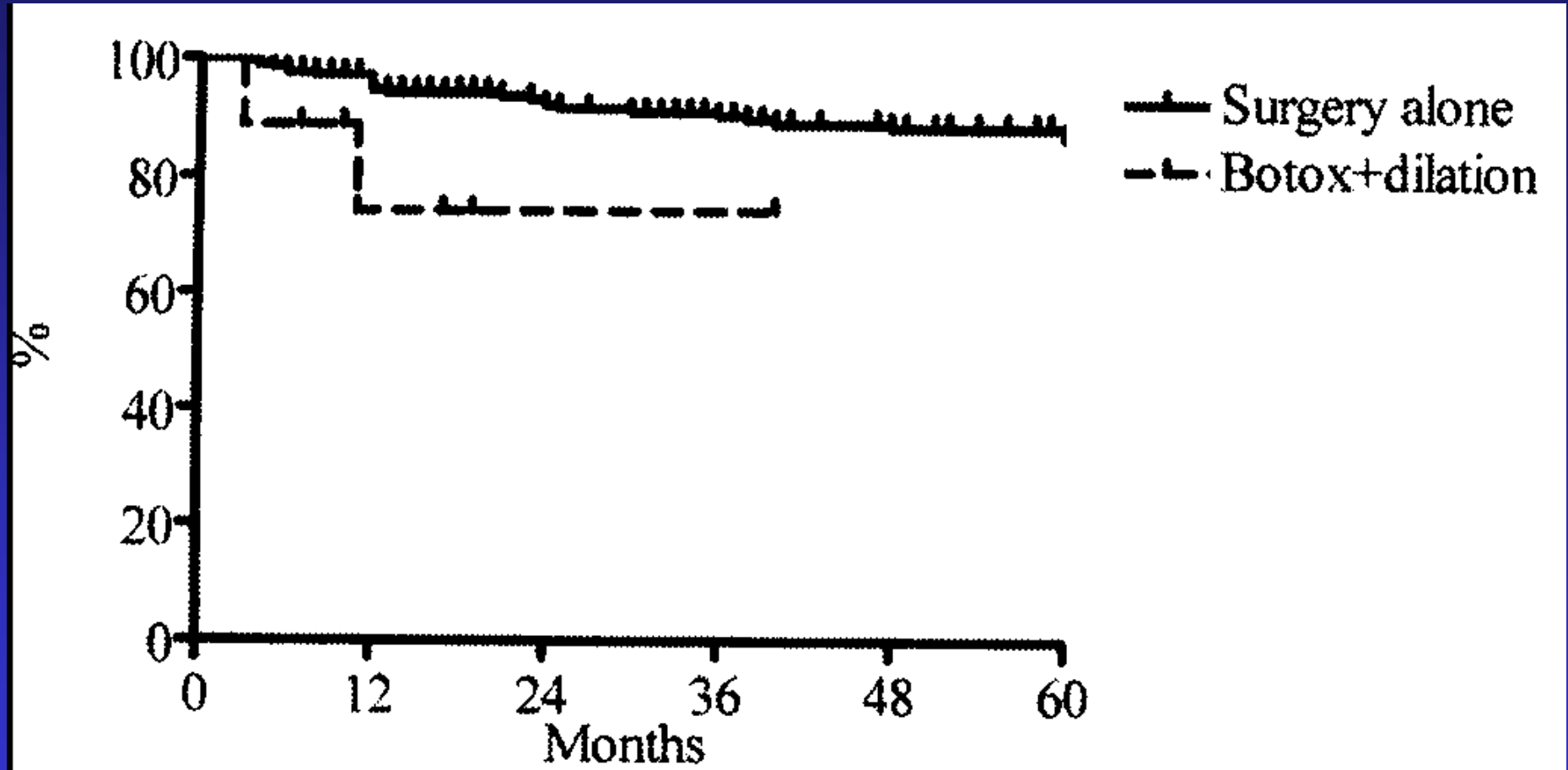
SAFETY AND EFFICACY OF DILATATION AFTER FAILED HELLER MYOTOMY

Levine et al, 1991; Zaninotto et al, 2002; Guardino et al, 2004



PREVIOUS PD and/or BOTOX AND OUTCOME OF HELLER MYOTOMY (HM)

Zaninotto et al, 2008



In 66% of 305 pts: no impact on difficulty or outcome of HM

Cowgill, 2007

In 73% of 209 pts: yes impact on difficulty and outcome of HM

Smith, 2006

CONCLUSIONS

- **Drugs should be considered as a temporary measure, reserved for patients waiting for more definitive treatment**
- **Botox injection is generally reserved for pts who are not candidate for more invasive treatment, but it may also be useful as a diagnostic/therapeutic trial**
- **Pneumatic dilatation is a safe and effective first line option, although some decline of efficacy occurs with time and several patients will need > 1 dilatation**
- **Patients benefit from a careful follow-up with objective testing**
- **A substantial minority of patients will need >1 treatment modality including myotomy**

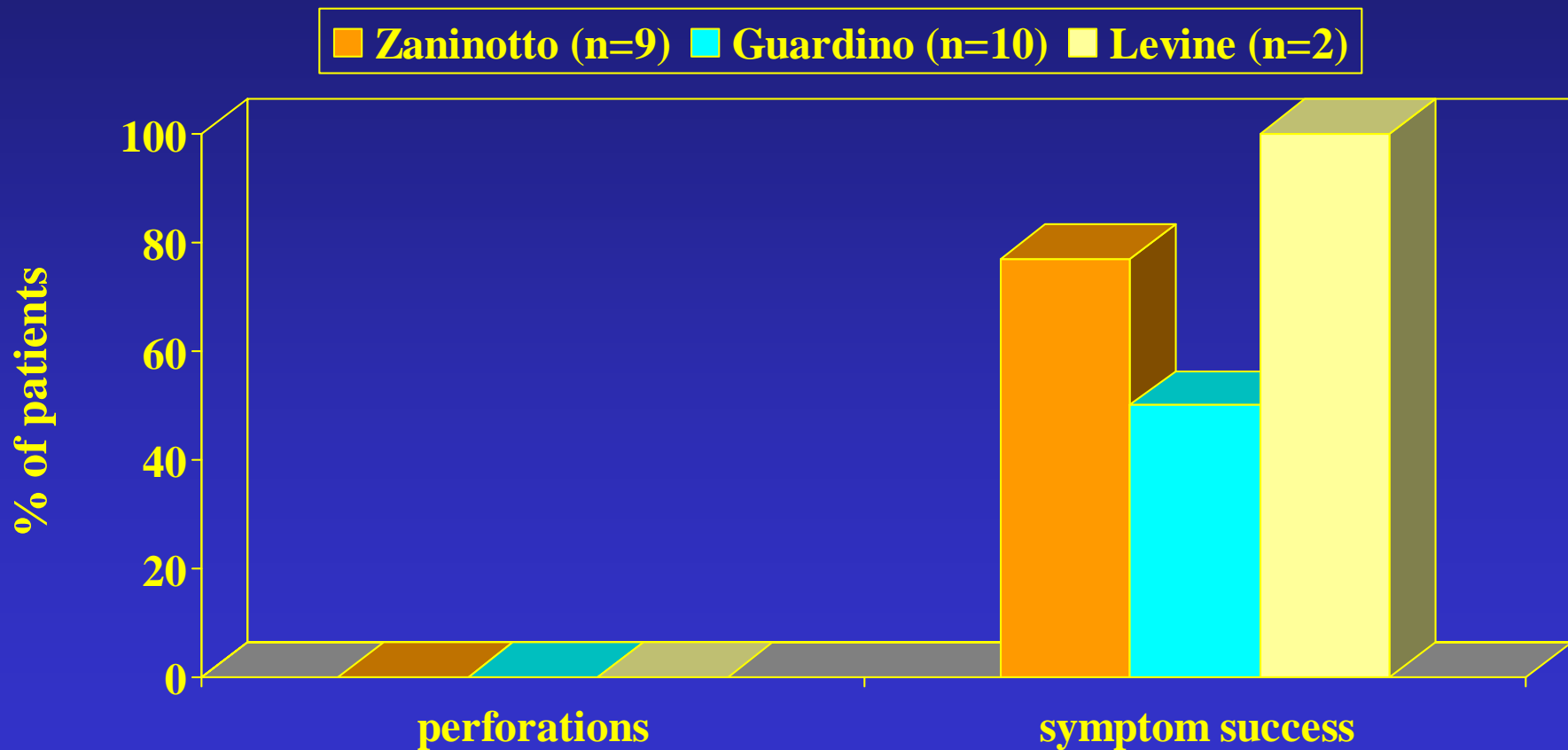


Cieca che fila (1922)

Siro Penagini

SAFETY AND EFFICACY OF DILATATION AFTER FAILED HELLER MYOTOMY

Levine et al, 1991; Zaninotto et al, 2002; Guardino et al, 2004



5/5 successful cases of Botox after failed myotomy *Annese et al, 1996; Vela et al, 2004*