

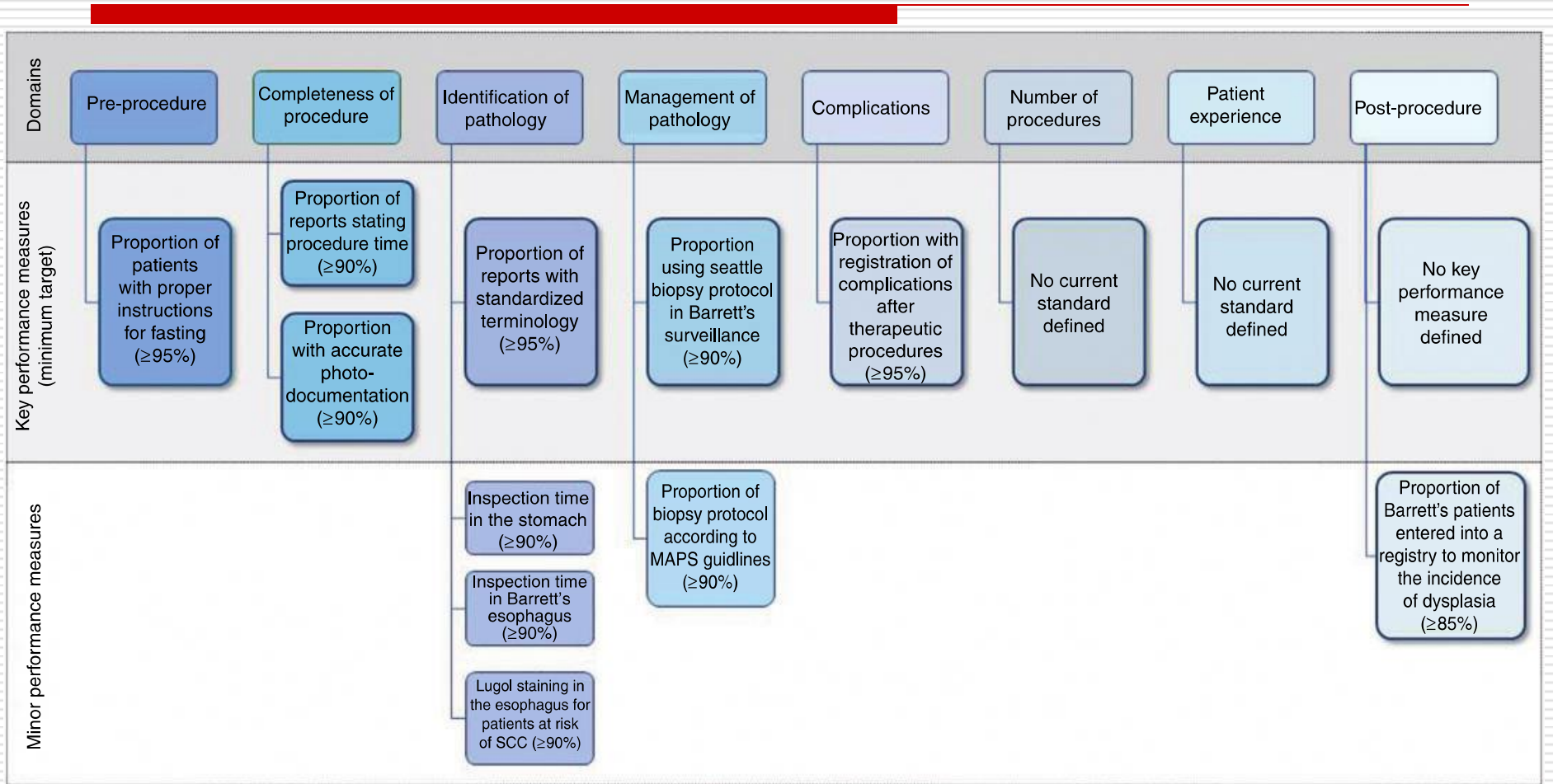
Ösophaguserkrankungen

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Performance measures for upper gastrointestinal endoscopy: A European Society of Gastrointestinal Endoscopy improvement initiative



Performance measures for upper gastrointestinal endoscopy: A European Society of Gastrointestinal Endoscopy improvement initiative



Major Qualitätsparameter (Ziel: > 90% - 95% bei 100 Endoskopien)

- ☐ **Nüchternphase** vor Endoskopie (2h Flüssigkeit, 6h feste Nahrung)
- ☐ Dokumentation **Untersuchungsdauer**
- ☐ Adäquate **Fotodokumentation** (10 Anatom. Landmarks, jede Pathologie)
- ☐ 4-Quadranten-Biopsie nach **Seattle Protokoll** bei Barrett alle 2cm, pro 2cm separates Gefäß (z.B. C4M5 = 12 Biopsien, 3 Gefäße)
- ☐ **Komplikations-Dokumentation** bei therapeutischen Endoskopien
(Dilatationen, EMR, ESD, PEG, Ligatur, Blutstillung, Ablationstherapien)

Performance measures for upper gastrointestinal endoscopy: A European Society of Gastrointestinal Endoscopy improvement initiative



Major Qualitätsparameter (Ziel: > 90% - 95% bei 100 Endoskopien)

☐ Standardisierte Terminologie

- ☐ Los Angeles Klassifikation bei erosiver Ösophagitis
- ☐ Zargar Klassifikation bei Ösophagus-Verätzungen
- ☐ Prag Klassifikation bei Barrett
- ☐ Forrest Klassifikation bei Ulkusblutung,
- ☐ Spiegelman Klassifikation bei Duodenaladenomen bei FAP
- ☐ Paris Klassifikation bei Läsionen im Magen und Ösophagus
- ☐ Baveno Klassifikation für Varizen

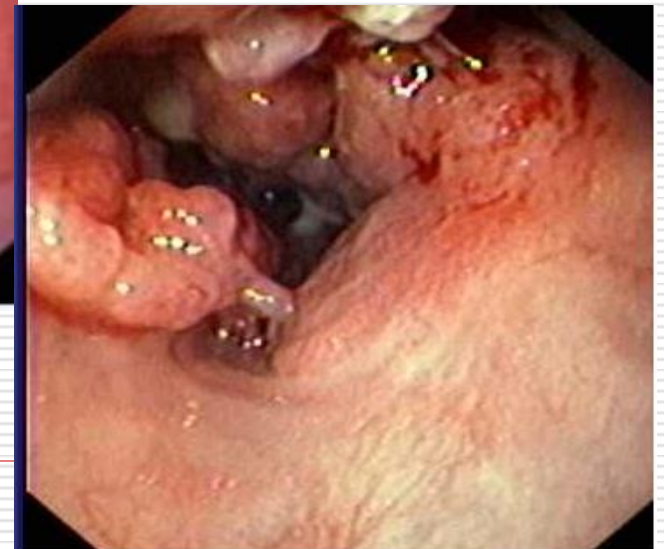
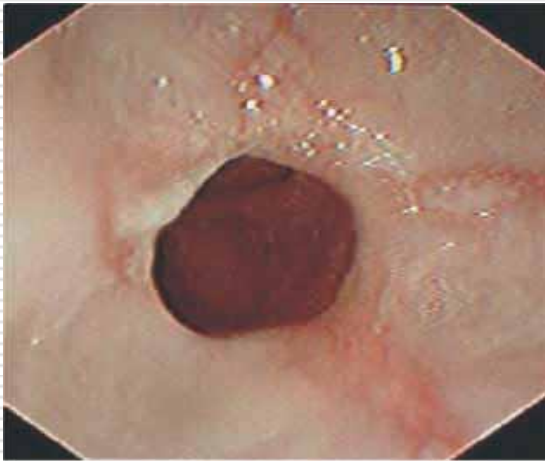
Performance measures for upper gastrointestinal endoscopy: A European Society of Gastrointestinal Endoscopy improvement initiative



Minor Qualitätsparameter (Ziel: 90% - 95% bei 100 Endoskopien)

- ☐ > 7min Untersuchungsdauer (Indexgastroskopie; Follow-up gastr. intestinaler Metaplasie)
- ☐ > 1min Inspektionszeit pro cm bei zirkumf. Barrett-Ösophagus
- ☐ Lugol'sche Chromoendoskopie bei kurativen HNO- und Lungentumoren zum Ausschluss eines Plattenepithelkarzinoms des Ösophagus
- ☐ Biopsie-Protokoll bei gastr. intestinaler Metaplasie (2x Antrum, 2x Korpus)
- ☐ Register für Barrett-Patienten

Gastroösophagealer Reflux und Barrett Ösophagus



Risk of death among users of Proton Pump Inhibitors: a longitudinal observational cohort study of United States veterans

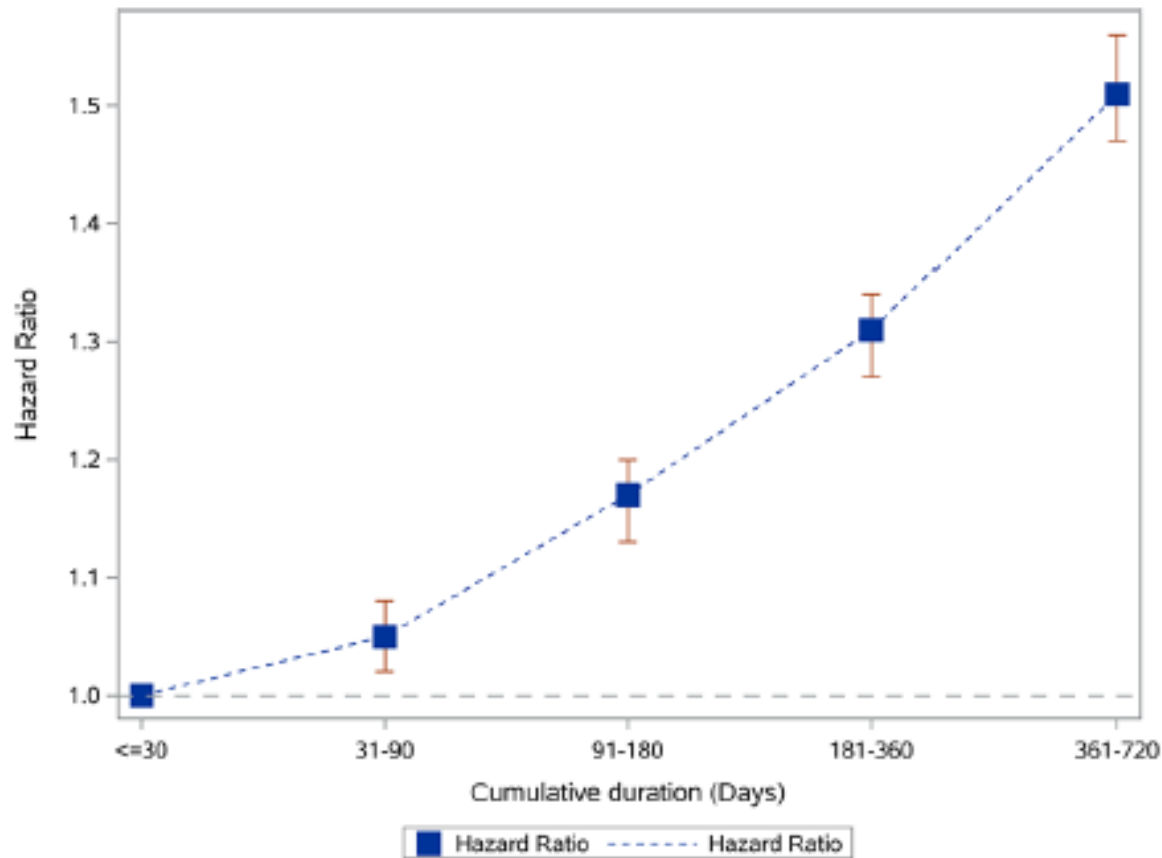


Figure 2 Duration of PPI exposure and risk of death among new PPI users (n=166 098). PPI, proton pump inhibitor.

Adverse effects of proton-pump inhibitor use in older adults: a review of the evidence

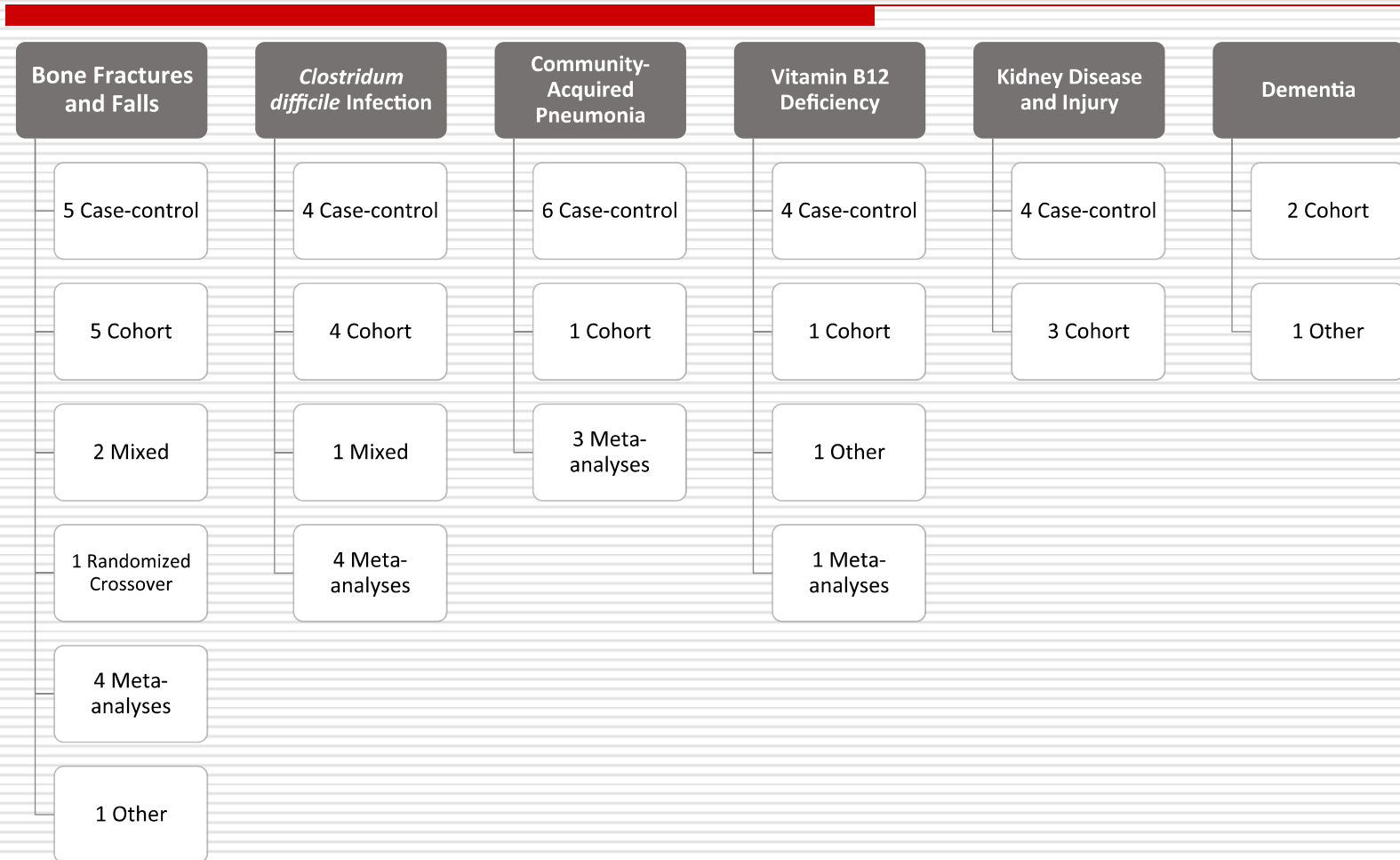
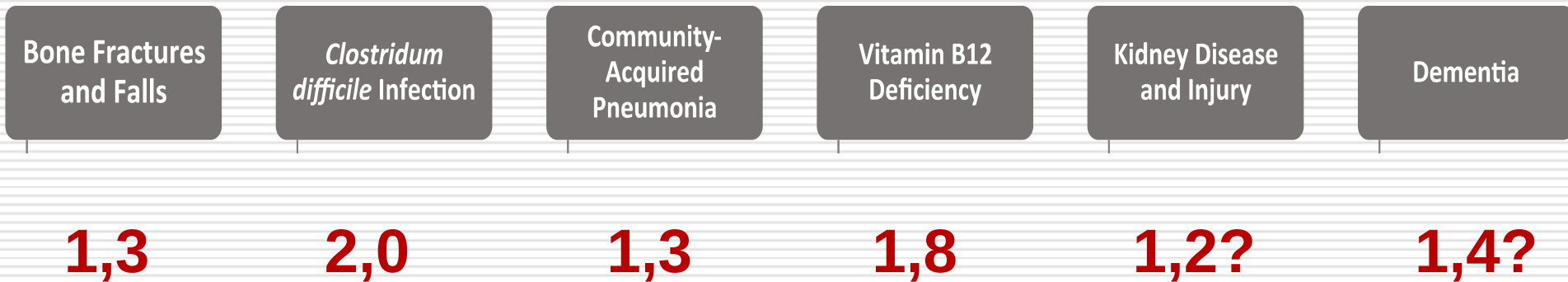


Figure 1. Summary of included study types for each adverse event.

Adverse effects of proton-pump inhibitor use in older adults: a review of the evidence

Odds ratio



Randomised clinical trial: mucosal protection combined with acid suppression in the treatment of non-erosive reflux disease – efficacy of Esoxx, a hyaluronic acid–chondroitin sulphate based bioadhesive formulation

Multicenter, double blinded, placebo controlled trial

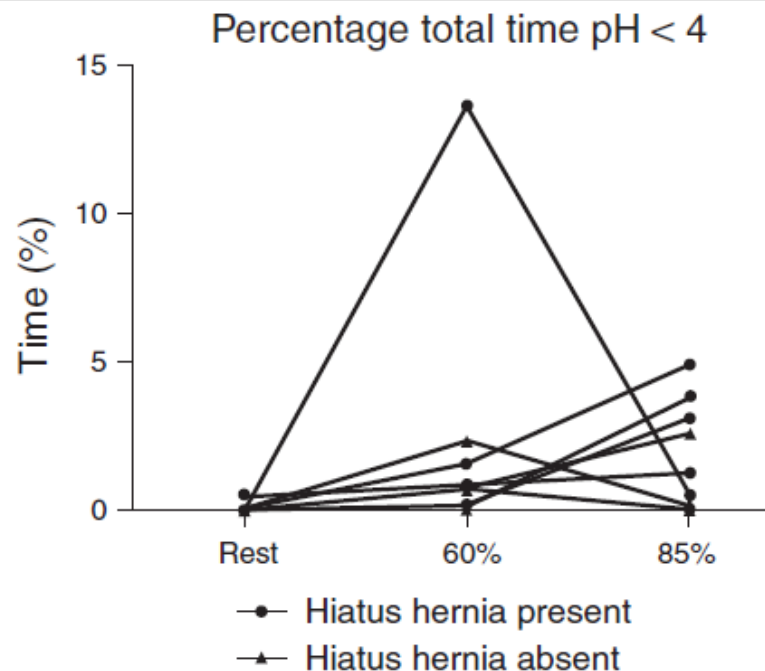
PPI Standarddos 1x/d + Ziverel® 4x10ml 1h nach Essen vs PPI + Placebo 4 x10ml

	PPI + Esoxx		PPI + Placebo		
Trial endpoints	<i>n/N</i>	%	<i>n/N</i>	%	<i>P</i> value
Primary					
No of patients with TSS reduction of at least 3 points	40/76	52.6	25/78	32.1	0.01
Secondary					
No of patients with 50% reduction of TSS	29/76	38.2	18/78	23.1	0.042
No of patients with TSS reduction at final visit	60/76	78.9	44/78	56.4	0.003
TSS (±s.d.) before and after treatment	Before	After	Before	After	
	8.53 ± 2.6	5.42 ± 2.1	8.03 ± 2.7	6.49 ± 2.6	
Change (±s.d.) in TSS	−3.11 ± 3.1		−1.54 ± 3.0		0.002

TSS, total symptom (heartburn, retrosternal pain, regurgitation, acid taste) score.

Effect of Running on Gastroesophageal Reflux and Reflux Mechanisms

- 10 gesunde Probanden; 18 – 50a; regelmäßig Sport (mind. 10km Laufen/Woche)

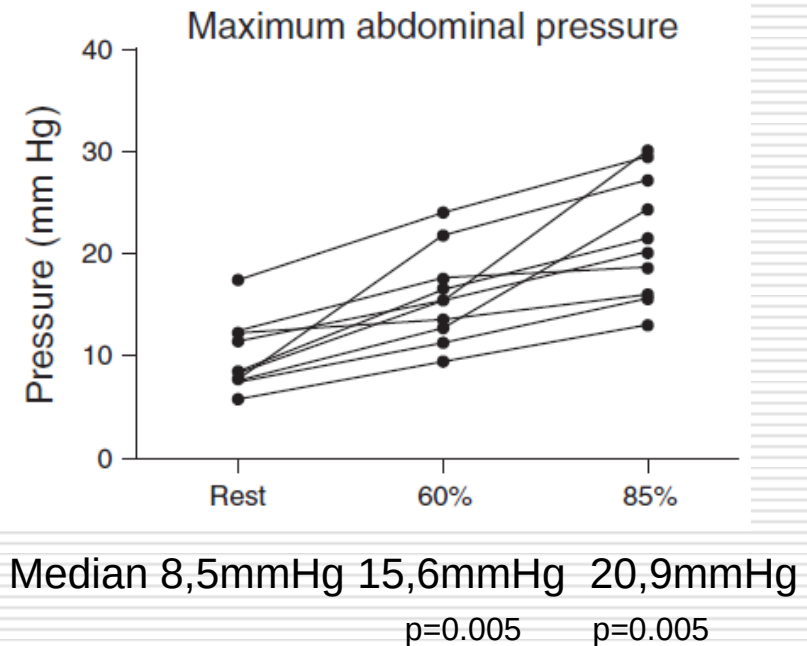
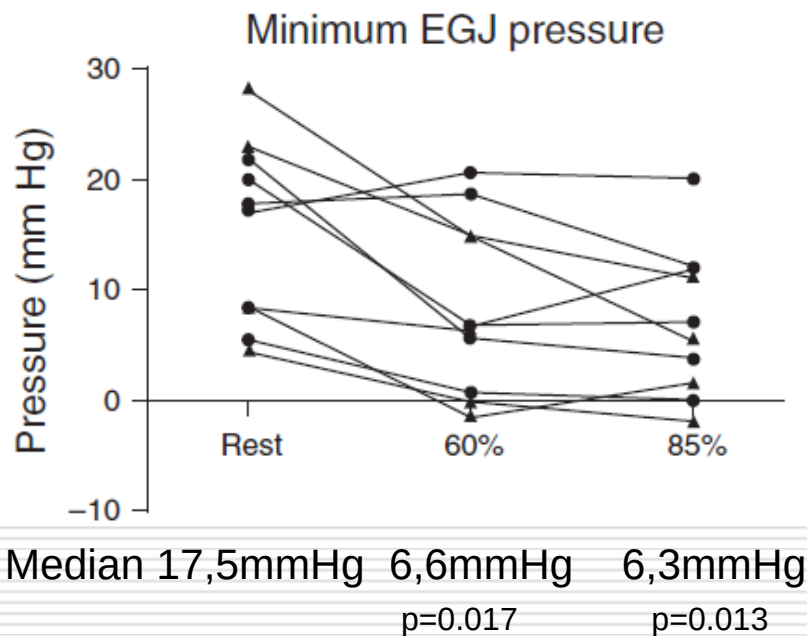


$p=0.018$ Rest vs 60% HRmax
 $p=0.018$ Rest vs 86%HRmax

Während Belastung: häufigere und längere Refluxepisodes

Effect of Running on Gastroesophageal Reflux and Reflux Mechanisms

- 10 gesunde Probanden; 18 – 50a; regelmäßig Sport (mind. 10km Laufen/Woche)



Abdominal Compression by Waist Belt Aggravates Gastroesophageal Reflux, Primarily by Impairing Esophageal Clearance

14 Pat. mit GERD und Refluxösophagitis/Barrett; BMI 26,8; WC 101cm, PPI 7d ex

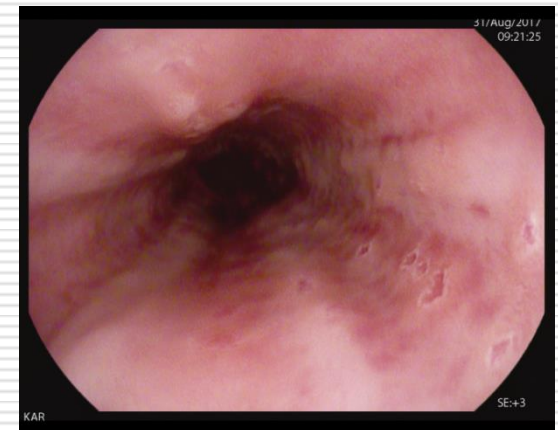
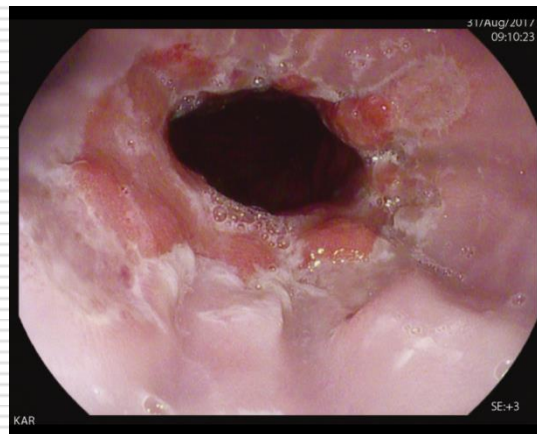
Table 4. Effect of Waist Belt on Mechanism of Acid Exposure Across the LES During 90-Minute Postprandial Period

	Belt off (IQR)	Belt on (IQR)	<i>P</i> value
Median no. of reflux events	2 (2)	4 (6)	.008
Median no. TLESRs	7 (3.3)	6 (5.3)	.279
Median no. TLESRs associated with reflux	2 (2)	3.5 (5)	.041
Average clearance time, s	23.0 (63.4)	81.1 (110.6)	.008
Median no. peristalsis to clear acid	1.0 (1)	1.5 (2)	.074
Median peristaltic distal esophageal pressure, mmHg	79.5 (48.1)	85.8 (32.8)	.387

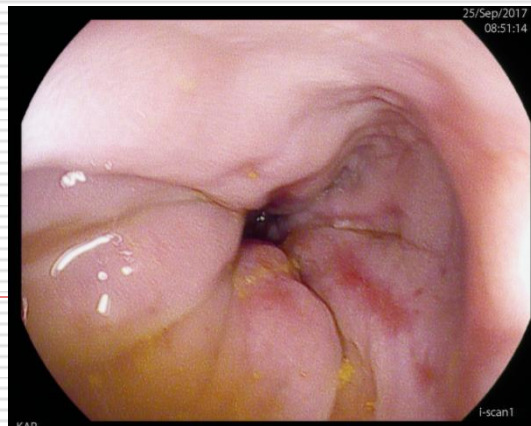
IQR, interquartile range; TLESR, transient lower esophageal sphincter relaxations.

Spitzensport und Gastroösophagealer Reflux

19a; männlich; Leistungssport: Skifahren

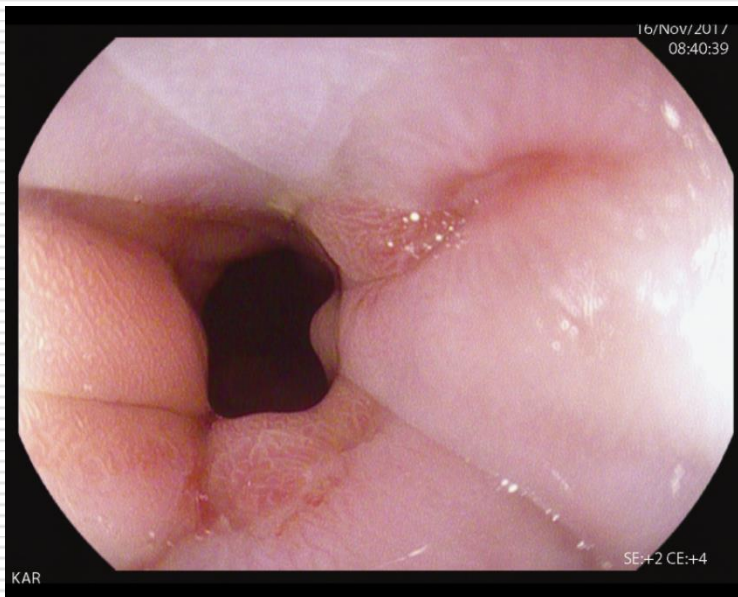


46a; männlich; Leistungssport: Gewichtheben

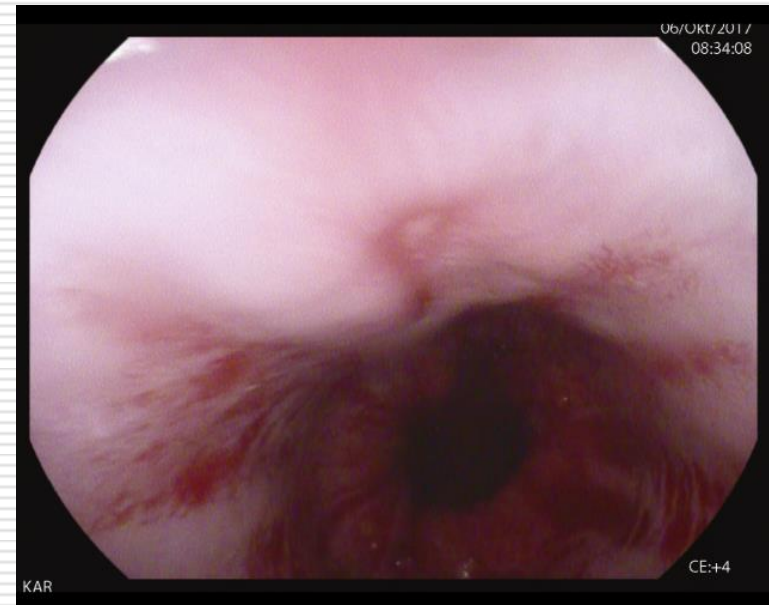


Spitzensport und Gastroösophagealer Reflux

**17a; weiblich;
Leistungssport: Basketball**



**26a; männlich;
Leistungssport: Thai-Boxen**



Barrett-Ösophagus: Progressionsrisiko bei Patienten mit „irregular Z-line“ (< 1cm)

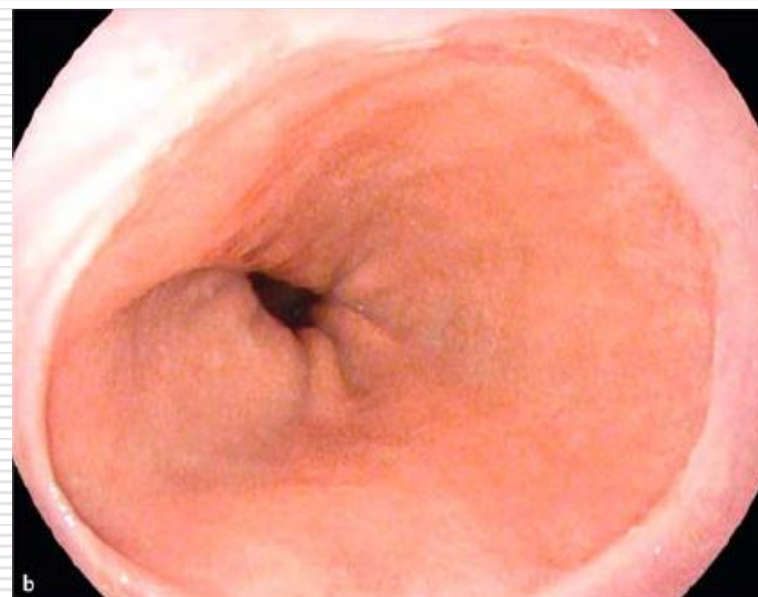
Prospektive multizentrische Kohortenstudie in USA und Europa
n=1791 mit Barrett, davon 167 mit „irregular Z-line“ < 1cm, Follow-up median 6 Jahre

Variable	Irregular Z line n = 167	BE $\geq$ 1 cm n = 1624	P value
Presence of hiatal hernia	37 (52.9%)	808 (72%)	<.001
Size of hiatal hernia, cm	3 (2, 4)	3 (2, 4)	.52
Visible lesions in BE segment	3 (1.8%)	92 (5.7%)	<.001
Any progression	0 (0.0%)	327 (20.1%)	<.001
Progression to HGD or EAC	0 (0.0%)	71 (4.4%)	.005
Follow-up in years	4.8 (2.3, 8.2)	6.0 (3.2, 8.3)	.545
Number of procedures	3.0 (2.0, 4.0)	4.0 (3.0, 5.0)	<.001

Endoscopic management of Barrett's esophagus: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement

STATEMENT 1

The diagnosis of BE is made if the distal esophagus is lined with columnar epithelium with a minimum length of 1 cm (tongues or circular) containing specialized intestinal metaplasia at histopathological examination.



Endoscopic management of Barrett's esophagus: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement

- ☐ **Kein** endoskopisches Routine-Screening für Barrett – Ösophagus
- ☐ **Screening kann erwogen werden bei:**
 - ☐ Langjährigen Reflux-Beschwerden (> 5 Jahre)
 - ☐ **und** mehreren Risikofaktoren
 - ☐ Alter > 50a
 - ☐ hellhäutig
 - ☐ männlich
 - ☐ Adipositas
 - ☐ erstgradig-Verwandte mit Barrett-Ösophagus oder Barrett-Karzinom

Endoscopic management of Barrett's esophagus: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement

Surveillance bei Barrett-Ösophagus HD Endoskopie (Essigsäure oder virtuelle Färbung)

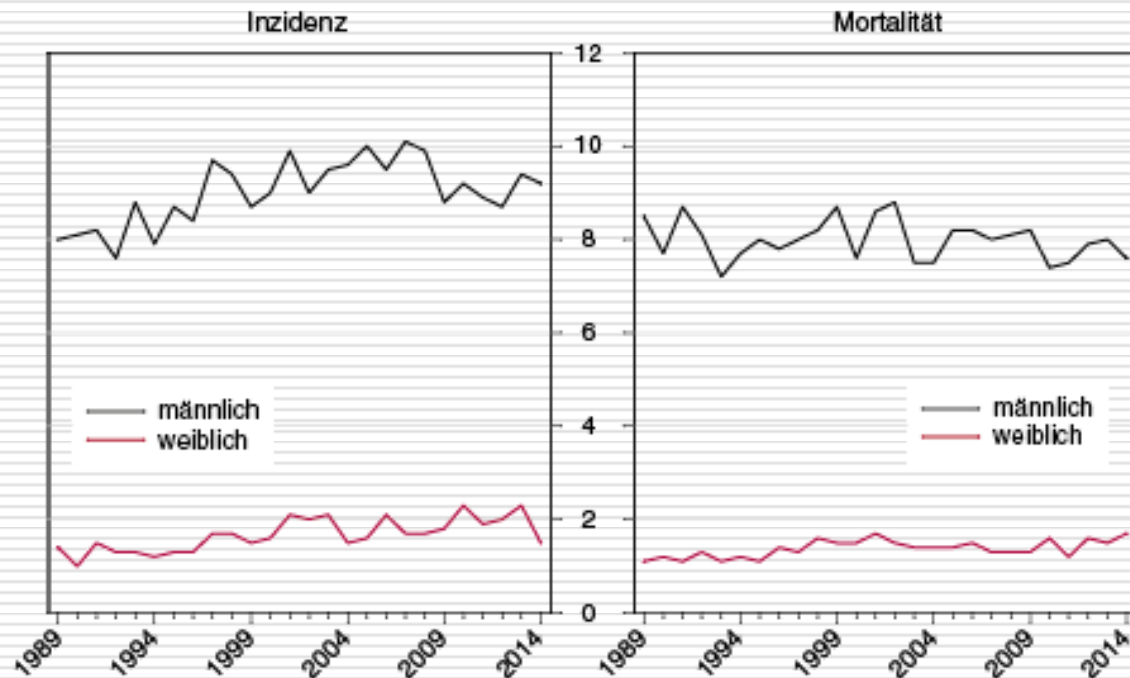
- ❑ Barrett < 1cm (irregular Z-line) keine endoskopische Überwachung
- ❑ Barrett 1 – 3cm: alle 5 Jahre
- ❑ Barrett 3 – 10cm: alle 3 Jahre
- ❑ Barrett < 10cm: Barrett Zentrum
- ❑ Pat. > 75a und bislang ohne Dysplasien: keine weitere Überwachung

Ösophaguskarzinom

- Inzidenz in Österreich leicht steigend
 - Vor allem Adenokarzinom zunehmend
 - Risikofaktoren für Barrett-Karzinom (♂, Raucher, Long-segment, Obst↓)
 - Neoadjuvante multimodale Therapie verbessert 5 Jahres Überleben über Zeitraum von 20 Jahre signifikant
 - postOP: auch langfristig Gewichtsverlust, unzureichende Kalorienzufuhr, Hohe Inzidenz an GI-Symptomatik, ↓Gewichtsverlust und ↓Lebensqualität
-

Ösophaguskarzinom in Österreich

Bösartige Neubildungen der Speiseröhre im Zeitverlauf
altersstandardisierte Raten auf 100.000 Personen
(EUR13-Weltbevölkerung)



Q: STATISTIK AUSTRIA, Österreichisches Krebsregister (Stand 15.11.2016) und Todesursachenstatistik.
Erstellt am 28.11.2016.

Perioperative Chemotherapie bei resektablen Tumoren des oberen GI Trakt (FLOT4-AIO)

N=716

Taxan-basiertes FLOT Schema (5-FU/Leucovorin/Oxaliplatin/Docetaxel)

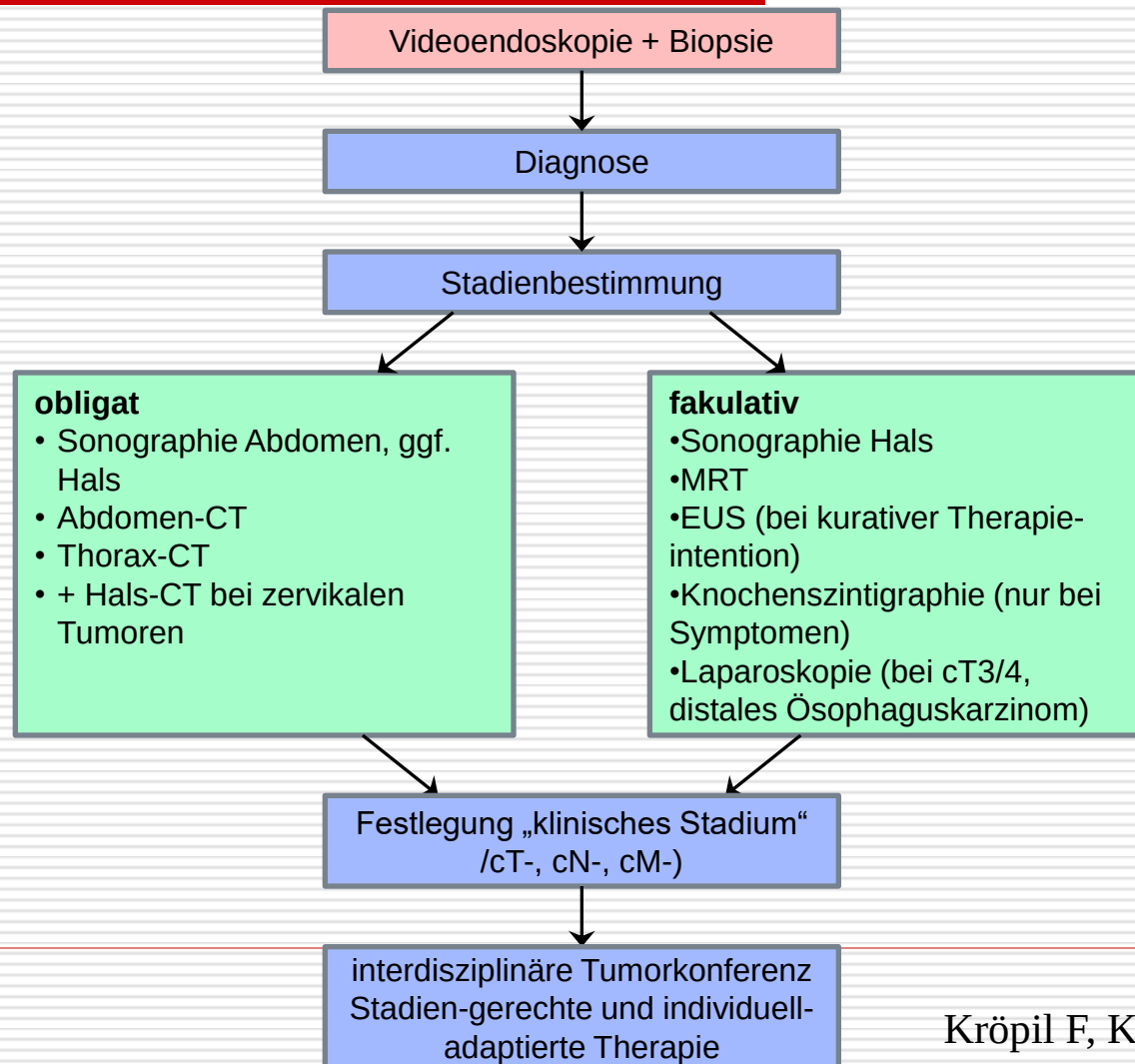
VS

Anthrazyklin-basiertes ECF/ECX Schema (Epirubicin/Cisplatin/5-FU od. Capecitabin)

	ECF/ECX	FLOT
PFS	18 Mo	30 Mo*
Medianes OS	35 Mo	50 Mo*
Periop. Kompl.	50%	30%*

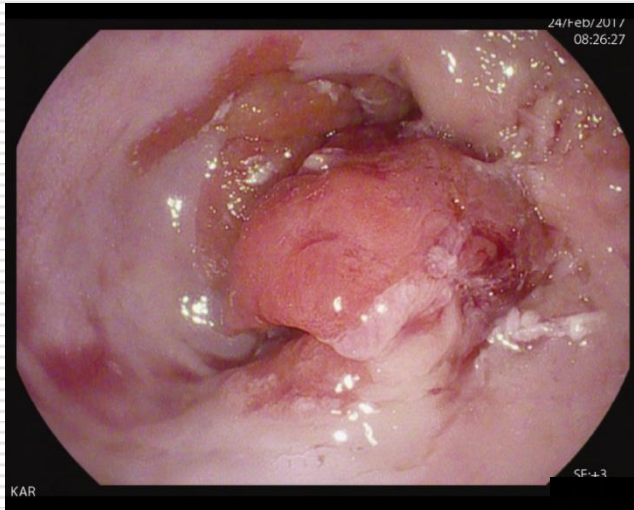
*p<0.01; FLOT: 4 Zyklen prä und postoperativ alle 2 Wo

Diagnostik und Stadienbestimmung des Ösophaguskarzinoms



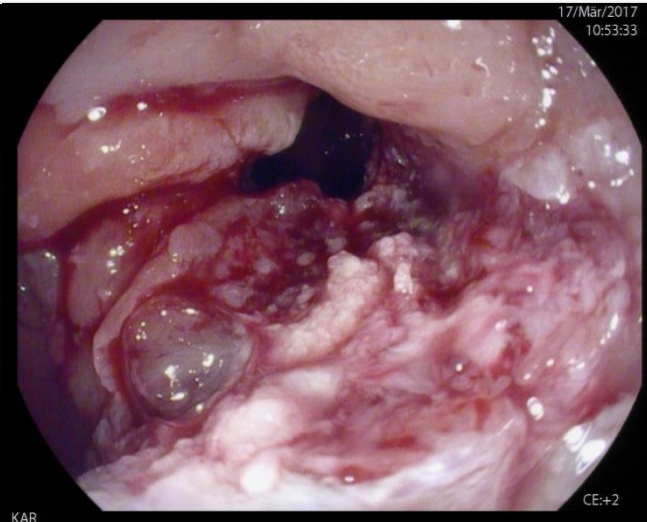
91-jähriger Patient mit Adenokarzinom des gastroösophagealen Übergangs

24.2.2017 Diagnose



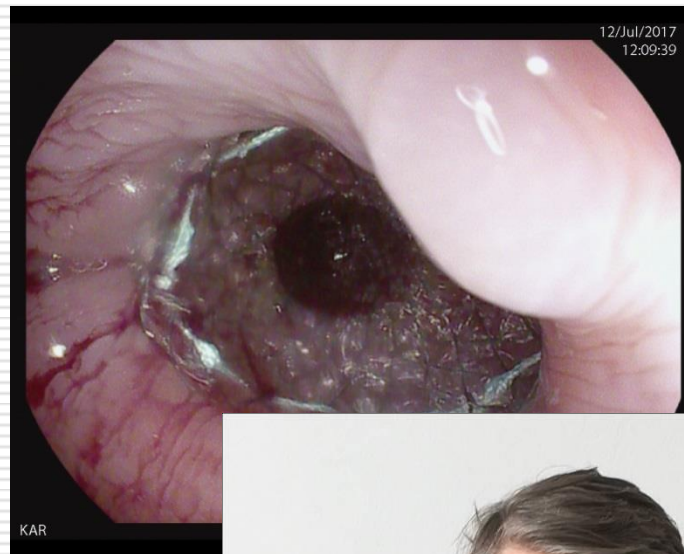
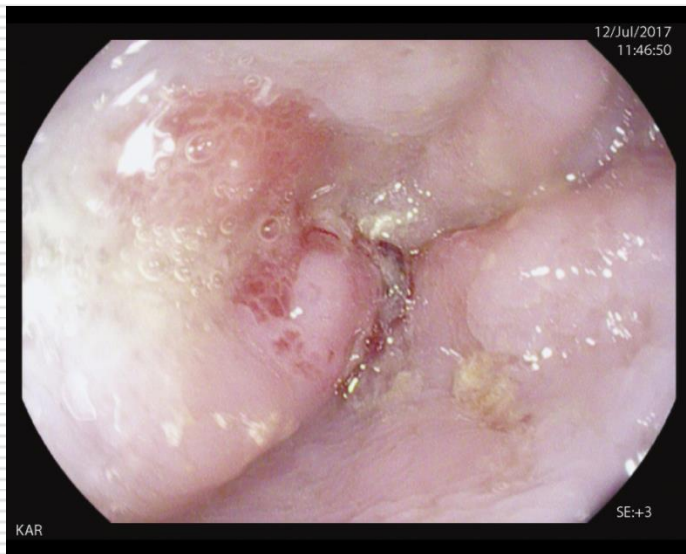
28.2.2017 interdisziplinäres GI Tumorboard
Keine neoadjuvante Therapie, operabel, Anästhesie?

17.3. + 4.5. 2017 endoskopische Tumorreduktion



91-jähriger Patient mit Adenokarzinom des gastroösophagealen Übergangs

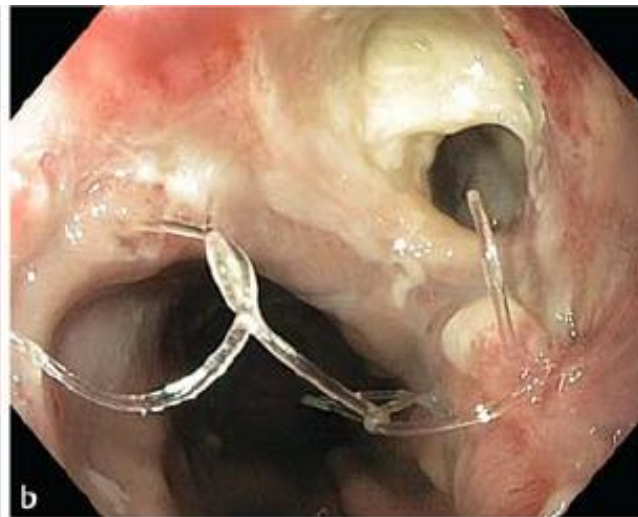
12.7.2017 hochgradige Stenose, Stent-Applikation



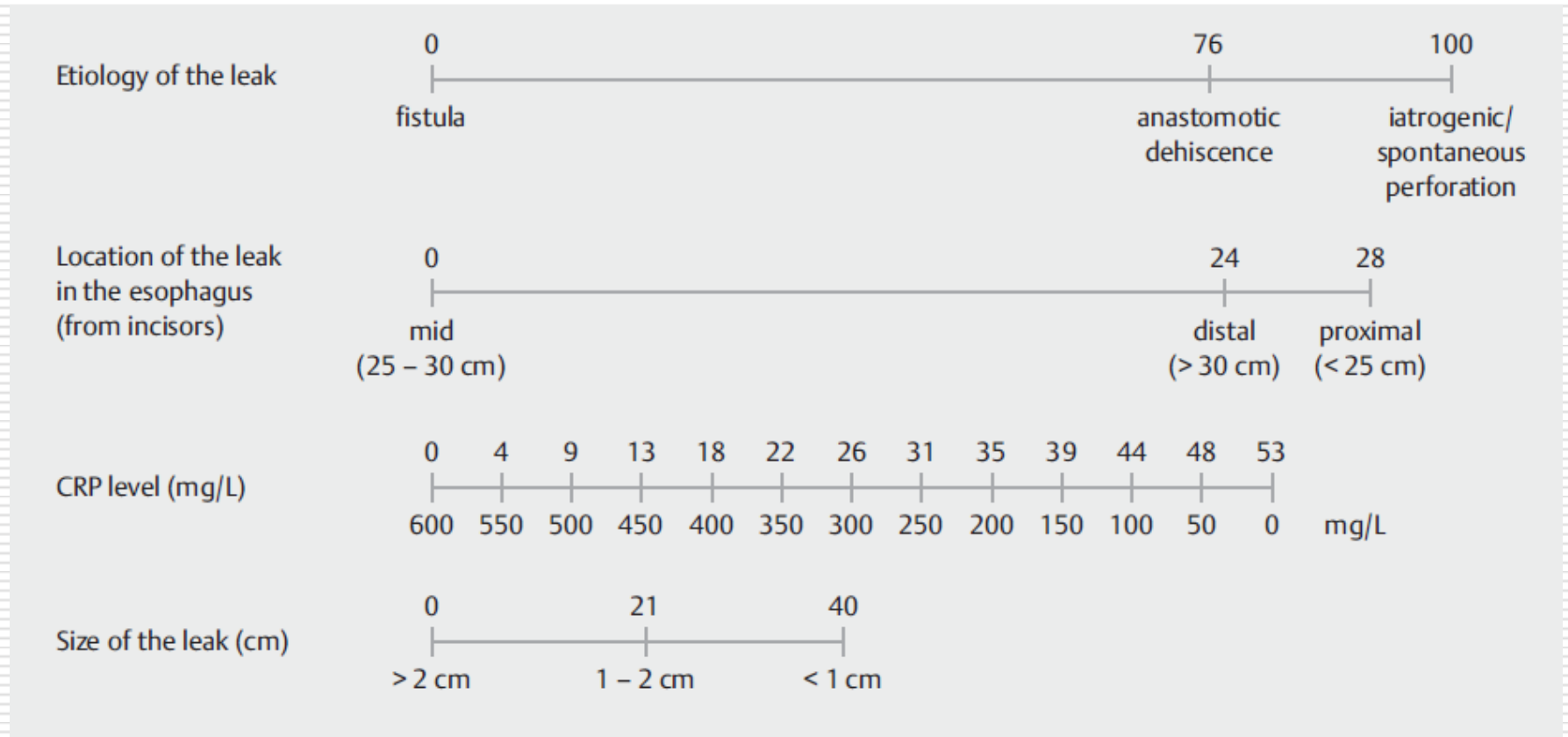
25.9.2017 letzte Kontrolle, guter AZ
3kg Gewichtszunahme



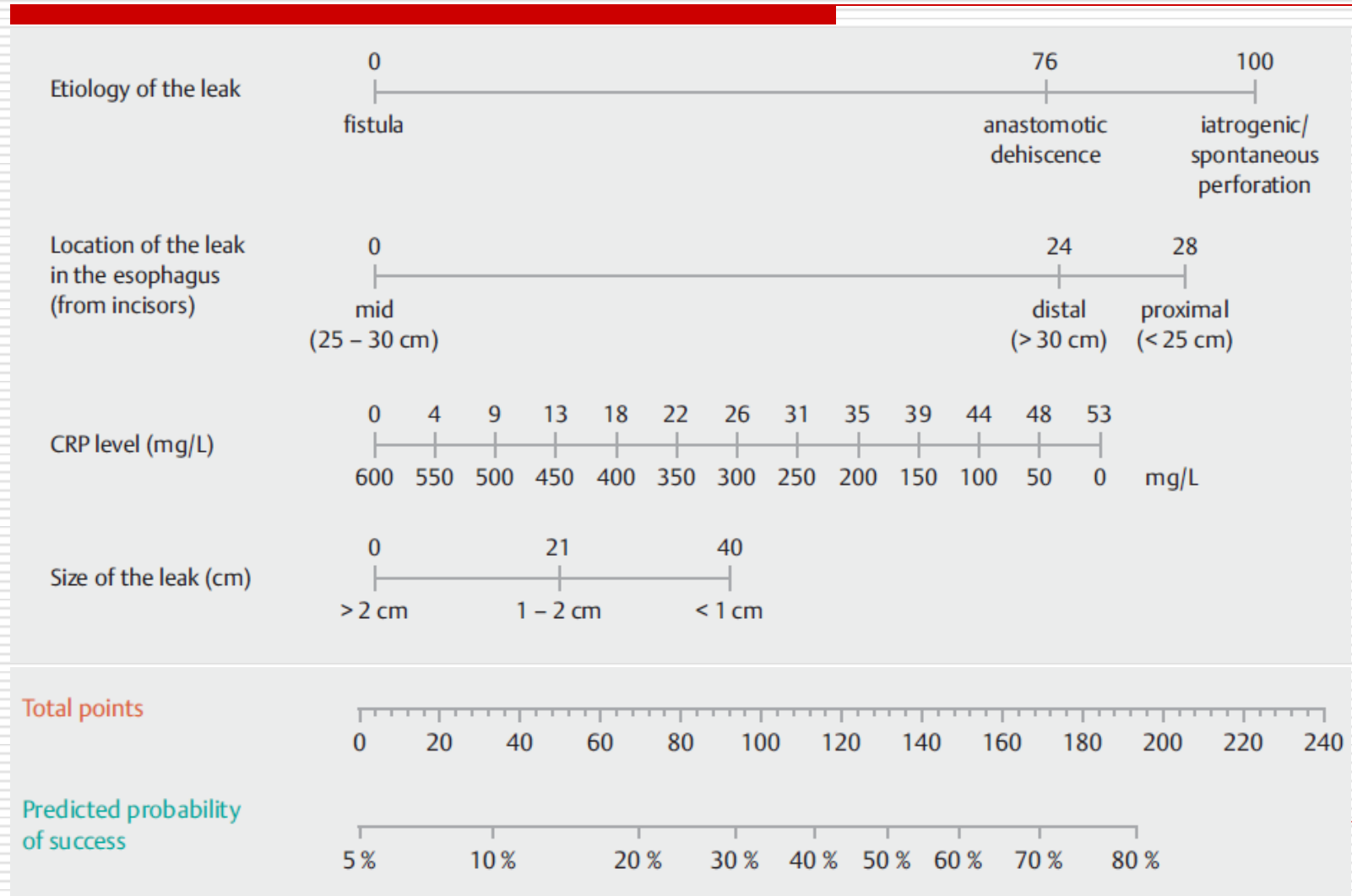
Stent placement for benign esophageal leaks, perforations, and fistulae: a clinical prediction rule for successful leakage control



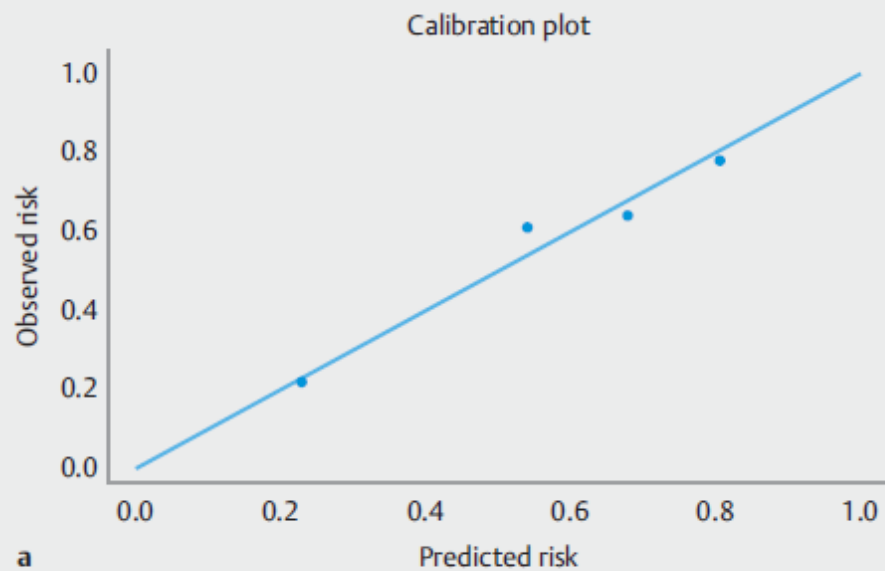
Stent placement for benign esophageal leaks, perforations, and fistulae: a clinical prediction rule for successful leakage control



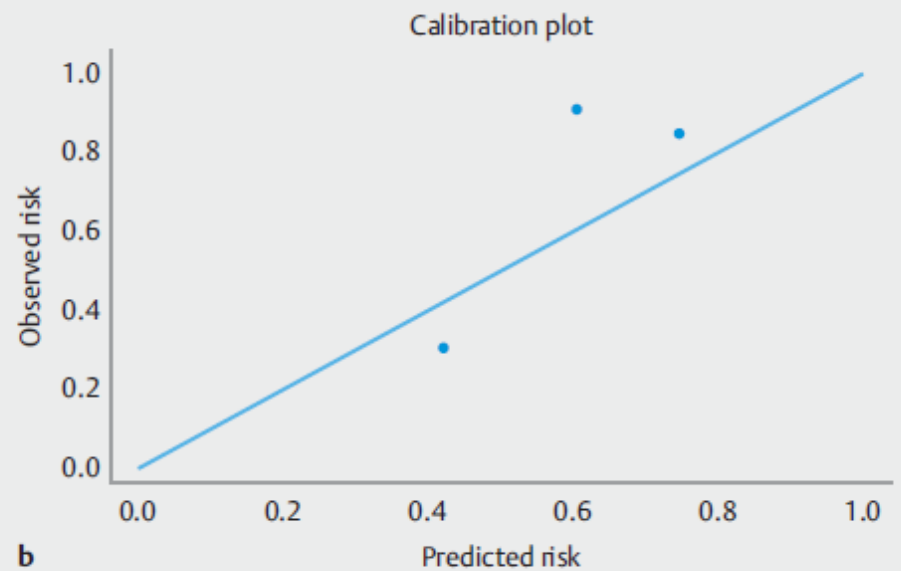
Stent placement for benign esophageal leaks, perforations, and fistulae: a clinical prediction rule for successful leakage control



Stent placement for benign esophageal leaks, perforations, and fistulae: a clinical prediction rule for successful leakage control



Derivation sample



Validation sample

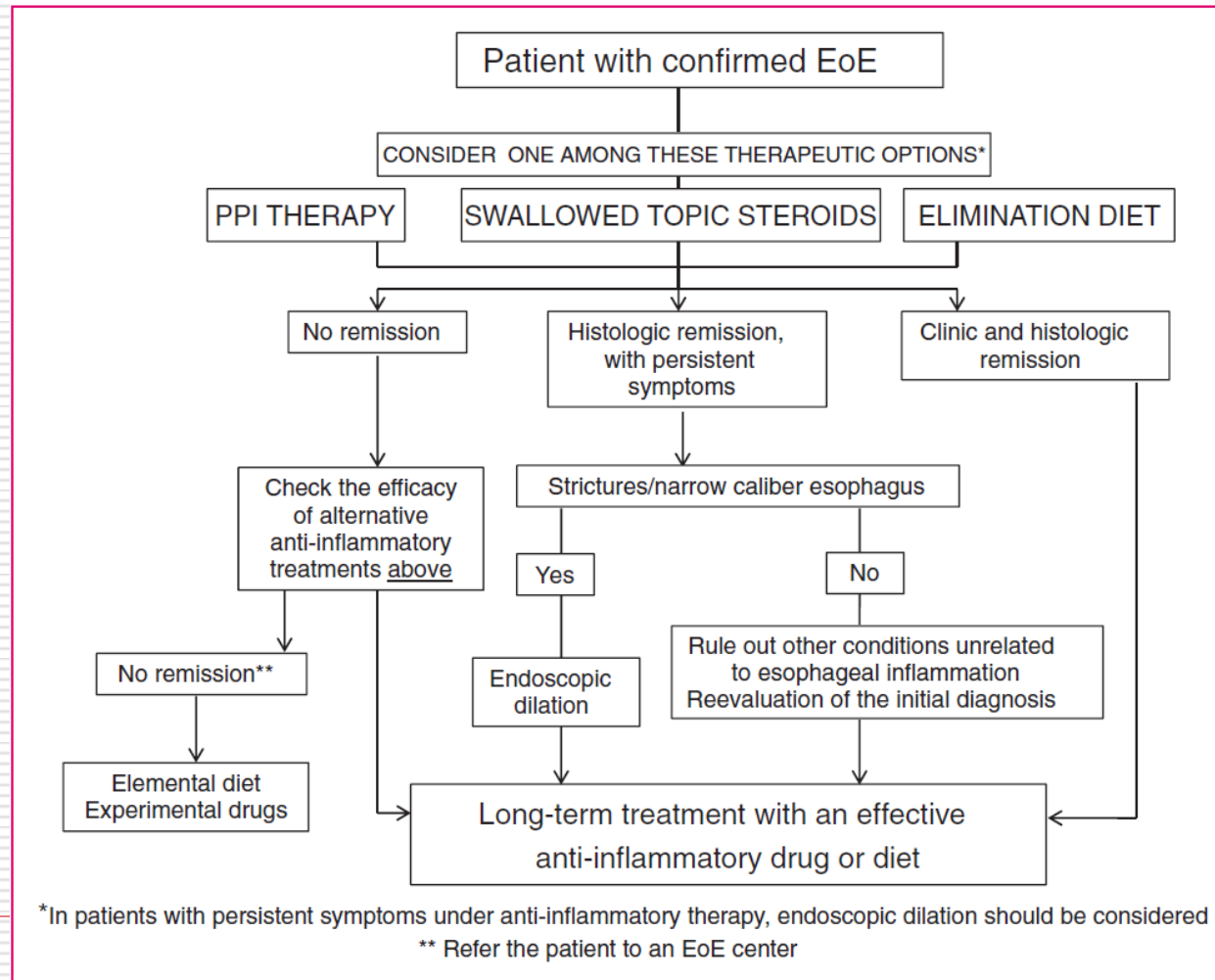
Eosinophile Ösophagitis

- ❑ Leitsymptom Dysphagie, Lebensmittel-Impaktion; m > f; Kinder und jüngere Erwachsene, Peak 30-50a
- ❑ Chronische, lokale immun-medierte eosinophile Inflammation
- ❑ Diagnose: > 15 eosinophile Granulozyten / hpf, fleckförmig, segmental;
- ❑ Allergische (IgG4) + genetische Faktoren (5q22 Locus)
- ❑ 2 Phenotypen: inflammatorisch u. fibrostenotisch (↑ Strikturen → Dilatation)
- ❑ Inzidenz steigend, Assoziation mit Nahrungsmittelallergien, Rhinitis und Atopien
- ❑ Therapie:

Beginn mit PPI → „PPI-responsive ösophageale Eosinophilie“
top. Kortikoide gleich wie „step-up“ Eliminationsdiät (Milch)

CAVE: „EoE-like“ Syndrom – KEINE eosinophile Infiltration

Guidelines on eosinophilic esophagitis: evidence-based statements and recommendations for diagnosis and management in children and adults



The role of maintenance therapy in eosinophilic esophagitis: who, why, and how?



Achalasie

- ❑ Neurodegenerative Motilitätsstörung (Degeneration Plexus myentericus)
- ❑ Motilitätsverlust und fehlende Relaxation d. unteren Ösophagussphinkters
- ❑ Ätiologie: autoimmun; infektiös (HSV, Varizellen?), genetisch
- ❑ selten, Inzidenz steigend; Gipfel: 30 – 60 Jahre, Kardinalsymptom: Dysphagie
- ❑ Diagnose: High Resolution Manometrie; Chicago Klassifikation (3 Subtypen)
- ❑ Komplikationen: Megaösophagus, Aspiration, Karzinom
- ❑ Therapie:
 - Hellersche Myotomie, Ballondilatation, POEM, Botulinumtoxin,
 - Nitrate, Calciumkanalblocker

Advances in the management of oesophageal motility disorders in the era of high-resolution manometry: a focus on achalasia syndromes

Subtype	IRP > ULN?	Oesophageal contractility	Added criteria
Type I	Yes	Absent contractility	None
Type II	Yes	Absent peristalsis	Pan-oesophageal pressurization with $\geq 20\%$ of swallows
Type III	Yes	• Absent peristalsis • Premature contractions with $\geq 20\%$ of swallows	None

Advances in the management of oesophageal motility disorders in the era of high-resolution manometry: a focus on achalasia syndromes

CC v3.0 diagnosis	IRP > ULN?	Oesophageal contractility	Notes
Oesophagogastric junction outflow obstruction	Yes	Sufficient peristalsis to exclude type I, II or III achalasia	• Heterogeneous group • Early or incomplete achalasia • Can resolve spontaneously • Recording artefacts
Absent contractility	No	Absent contractility	• Can be achalasia • Abnormal FLIP distensibility index supports achalasia • Oesophageal pressurization with swallows or MRS supports achalasia
Distal oesophageal spasm	Yes or no	$\geq 20\%$ premature contractions (DL < 4.5s)	Might be spastic achalasia
Jackhammer	Yes or no	$\geq 20\%$ of swallows with DCI > 8,000 mmHg·s·cm	Might be spastic achalasia if DL < 4.5 s with $\geq 20\%$ swallows
Opioid effect (not in CC)	Yes	Normal, hypercontractile or premature	Can mimic EGJOO, type III achalasia, DES or jackhammer
Mechanical obstruction (not in CC)	Yes	Absent, normal or hypercontractile	EUS, CT or MRI of the EGJ might clarify the aetiology

Advances in the management of oesophageal motility disorders in the era of high-resolution manometry: a focus on achalasia syndromes

Condition	Preferred treatment	Comment
<i>CC v3.0 achalasia subtypes</i>		
Type I achalasia	PD, LHM, POEM	• All treatments efficacious • Expect more reflux after POEM, especially in patients with hiatal hernia
Type II achalasia	PD	All treatments are highly efficacious, PD has least morbidity and lowest cost
Type III achalasia	POEM	Can calibrate the myotomy to the spastic segment
<i>Achalasia syndromes beyond CC v3.0</i>		
Oesophagogastric junction outflow obstruction	• 1st choice: observation • 2nd choice: calcium-channel blockers • 3rd choice: botulinum toxin type A	• Many cases resolve spontaneously • If achalasia therapies are applied, 1st choice PD, 2nd choice POEM
Absent contractility deemed to be achalasia	PD, LHM, POEM	Treat as type I achalasia
DES deemed to be achalasia	POEM	Treat as type III achalasia
Opioid effect	• 1st choice: discontinue opioid • 2nd choice: botulinum toxin type A • 3rd choice: PD • 4th choice: POEM	Time course of reversal with opioid cessation is not known
Obstruction	• Conventional dilation • Operative reversal if relevant • Directed medical therapy if relevant	Many entities mimic achalasia, sometimes termed 'pseudoachalasia': eosinophilic oesophagitis, cancer, reflux stricture etc.

Konklusion I: Ösophaguserkrankungen

□ Gastroskopie

- ESGE: Definition von 11 Qualitätsparameter (Standardisierung und regelmäßige Evaluierung)

□ Ösophaguskarzinom

- Perioperatives FLOT – Schema: neuer Standard bei Adenokarzinom

□ Ösophagusperforation

- Einfaches Vorhersage-Modell welcher Patient von Stent-Applikation profitiert (Ätiologie, Lokalisation, CRP, Größe der Perforation)

□ Eosinophile Ösophagitis

- Aktuelle UEG-Guidelines zur Diagnose und Therapie 2017
 - Therapie-Algorithmus, jedoch zur Langzeittherapie offene Fragen
-

Konklusion II: Ösophaguserkrankungen

□ GERD und Barrett Ösophagus

- PPI Therapiestandard, jedoch Langzeittherapie hat Nebenwirkungen
- Neue Therapieoptionen verfügbar
- Sport kann Reflux verursachen bzw. verstärken
- „irregular Z-line“ (< 1cm) keine Risiko
- ESGE Position Statement: neue Surveillance-Empfehlungen

□ Achalasie

- High Resolution Manometrie: Standard vor Therapieentscheidung
 - Therapie abhängig vom Subtyp (Chicago Klassifikation)
 - POEM teilweise bereits Therapiestandard
 - Zahlreiche Achalasie-Syndrome: differenzierte Therapie
-