Gastroenterologisk diagnostik

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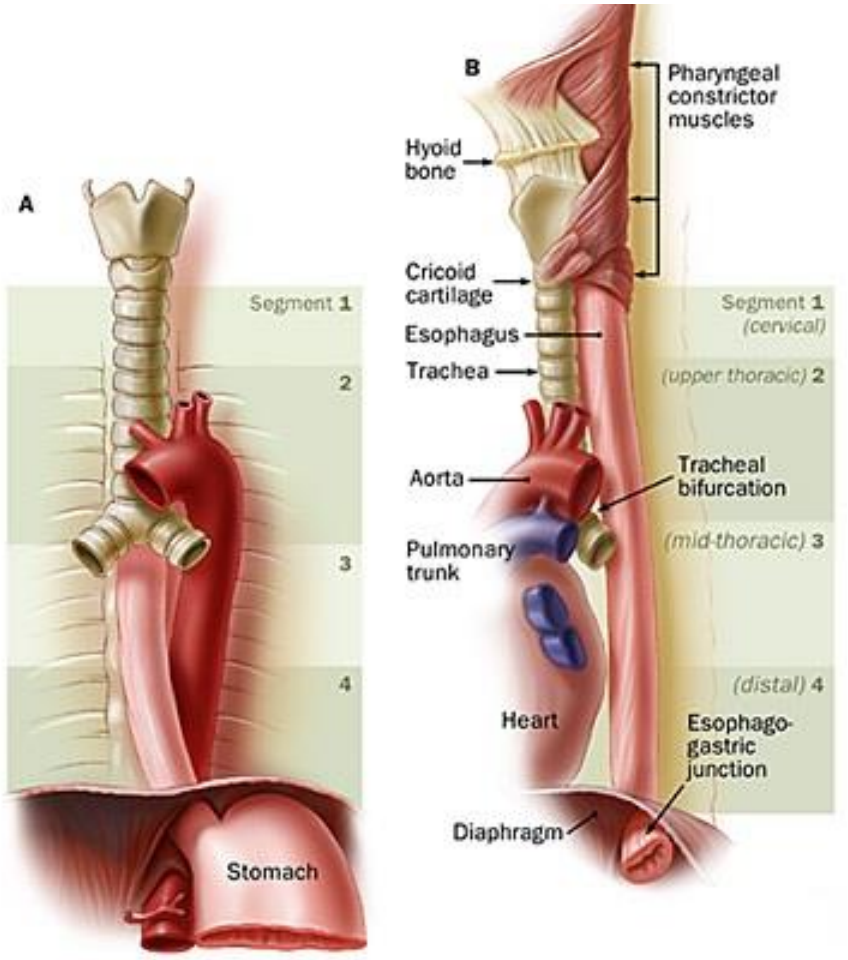
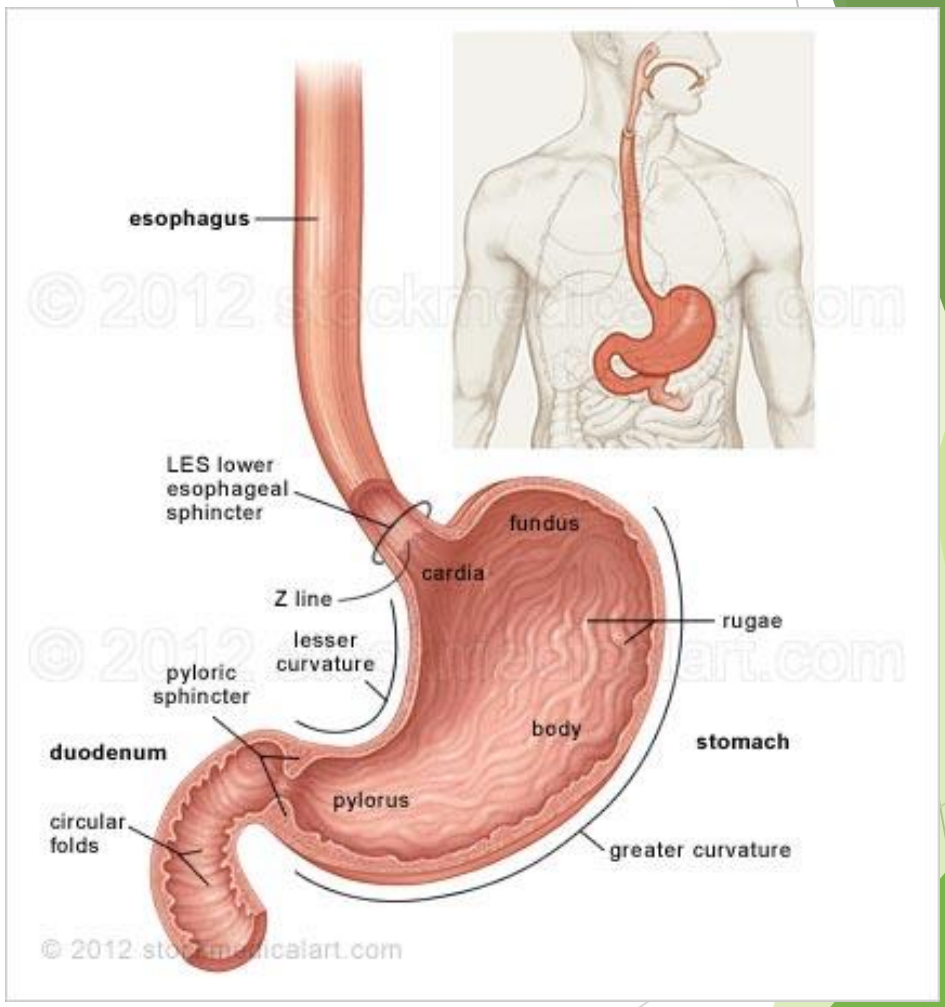
NKR øvre dysfagi – opsporing, udredning og udvalgte indsatser[1]

- ↑Overvej at tilbyde voksne i høj risiko for øvre dysfagi systematisk opsporing med beskrevet procedure til identifikation af øvre dysfagi .
- √ Det er god praksis at tilbyde patienter med tegn på øvre dysfagi en systematisk klinisk undersøgelse.

1: National klinisk retningslinje for øvre dysfagi - Opsporing, udredning og udvalgte indsatser. Sundhedsstyrelsen, 2015

Anatomi


A
Segment 1
2
3
4
Stomach
B
Pharyngeal constrictor muscles
Hyoid bone
Cricoid cartilage
Esophagus
Trachea
Aorta
Tracheal bifurcation
Pulmonary trunk
Heart
Esophago-gastric junction
Diaphragm
Segment 1 (cervical)
(upper thoracic) 2
(mid-thoracic) 3
(distal) 4


esophagus
LES lower esophageal sphincter
fundus
cardia
Z line
rugae
lesser curvature
pyloric sphincter
duodenum
body
stomach
pylorus
circular folds
greater curvature
© 2012 stockmedicalart.com

Dysfagi –differentialdiagnose

- Årsag:
  - Alder
  - cancer
  - Neurologiske
  - Peptisk
  - Motilitetsforstyrrelser/neuromusculære lidelser
  - Bindevævssygdomme
  - Strikturelle (membran og ringdannelser)
  - Medicin bivirkninger
  - Øvrige: fx Divertikler; Diabetes; eosinofil esophagitis (EOE)

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- The causes and associations of dysphagia with different disease states are different among different age groups.
- Dysphagia is increasingly seen by clinicians based on increasing prevalence of gastroesophageal reflux disease, a growing population more than 65 years old, and a longer life expectancy.
- **Infancy and early childhood** dysphagia are associated with neurodevelopmental delay.
- **Childhood through young adult** dysphagia is more commonly related to acute infectious processes.
- Dysphagia in **middle age** is associated with gastroesophageal and immunologic causes.
- The age group **older than 60 years** is more affected by oncologic and neurologic causes of dysphagia.
- **Older age groups** have more prominent dysphagia related to stroke, neurodegenerative disease, and dementia.
- Although these generalizations may be of help to the primary assessment of nonsevere dysphagia, **neoplastic causes** should always be considered.
- A thorough dysphagia assessment should be always be used in the presence of multiple symptoms, severe dysphagia, and failure to respond to initial treatment.

Roden DF, Otolaryngol Clin N Am 46 (2013)

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Table 2
Causes of dysphagia across all age groups

0–9 y	10–19 y	20–29 y	30–39 y	40–49 y	50–59 y	60–69 y	70–79 y	80–89 y
EE	TBI	Neck infection	EE	EE	EE	Stroke	Stroke	Alzheimer
Systemic sclerosis			Inflammatory myopathy	Sjögren syndrome	Inflammatory myopathy	Parkinson disease	Parkinson disease	Frontotemporal dementia
TBI			MS	HTGM	HTGM	ALS	Alzheimer	
Thyroglossal duct cyst			Thyroglossal duct cyst	Nasopharyngeal cancer	Systemic sclerosis	Lymphocytic esophagitis	Anaplastic thyroid cancer	
Prematurity			HTGM	Achalasia	Achalasia	HTGM	Achalasia	
Mitochondrial cytopathy				Acute supraglottitis	DES	Inclusion body myositis	DES	
Cerebral palsy				MS	MS	Esophageal SCC	Stricture	
Cardiac surgery				Cervical dystonia	NSMD	Anaplastic thyroid cancer	Antipsychotic exposure	
				Nutcracker esophagus	Stroke	Esophageal AC		
				Lymphocytic Esophagitis	Lymphocytic esophagus	GEJ AC		
				Hyperdynamic UES	Head and neck cancer	Head and neck cancer		
				GERD	GERD	Laryngectomy		
				Esophagitis	Esophagitis	Schatzki ring		
				Reflux surgery	Reflux surgery	Alzheimer		
				Mental health disorder	Type 1 diabetes	Zenker diverticulum		
				Tetraplegia	Food impaction	Cardiac surgery		
					Mucositis	Stricture		
					Cervical spine surgery	Cervical spine surgery		
					Cerebral palsy	Frontotemporal dementia		
					Mental health disorder	Mental health disorder		
					Radiation			
					Chemoradiation			
					Thyroid disease			

Abbreviations: AC, adenocarcinoma; ALS, amyotrophic lateral sclerosis; DES, diffuse esophageal spasm; EE, eosinophilic esophagitis; GEJ, gastroesophageal junction; HTGM, heterotopic gastric mucosa; MS, multiple sclerosis; NSMD, nonspecific motility disorder; TBI, traumatic brain injury.
This table lists the most commonly published causes of dysphagia in each age group, stratified by decade. Many more causes of dysphagia manifest in the elderly populations, and dysphagia may represent severe diseases such as neurodegenerative processes or cancer.

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ESOPHAGUSCANCER og VENTRIKELCANCER

- Esophaguscancer 500/år
- Ventrikelcancer 500/år
- Incidensen for GEJ cancer er stigende
- Mænd:kvinder 2:1

- Tsukamoto M, Dysphagia, April 2016
- 5362 outpatients (Digestive Center)
- 3,5 % (186) dysphagia
  - 18,3 % (34) cancer
  - 12,9 % (24) gastroesophageal reflux disease
  - 11,3 % (21) esophageal motility disorder
  - 57,5 % (107) miscellanous

Previous studies: prevalance cancer patient referred with dysphagia 4 – 15 %

”Excluding malignancy is the most important part of the assessment of patients with dysphagia”

Inviteret befolkningsgruppe - gastroskoperet (italiensk studie)

	Asymptomatic		Dyspeptic symptoms[a]		Reflux symptoms alone[a]		Alarm symptoms or signs	
	n	% (95% CI)[b]	*n*	% (95% CI)[b]	*n*	% (95% CI)[b]	*n*	% (95% CI)[b]
Total	552		285		109		77	
Endoscopic finding								
Absent	455	82.4	207	72.6	72	64.1	50	64.9
Present	97	17.6	78	27.4	37	33.9	27	35.1
Type of finding								
Esophagitis	47[c]	8.5 (6.2–10.8)	36[d]	12.6 (8.7–16.5)	27[f]	24.8 (16.5–33.0)	11[h]	14.3 (6.3–22.3)
Barrett's esophagus	4	0.7	7[e]	2.5	2[g]	1.8	0	0
Peptic ulcer	22	4.0 (2.3–5.6)	26	9.1 (5.8–12.5)	7	6.4 (1.7–11.1)	6	7.8 (1.7–13.9)
Gastric	10	1.8	4	1.4	3	2.7	4	5.2
Duodenal	12	2.2	22	7.7	4	3.7	2	2.6
Gastroduodenal erosions	28	5.1	15	5.3	7	6.4	5	6.5
Neoplasia	3	0.5	1	0.4	0	0	7	9.1

Dyspeptic sympt: epigastric pain, postprandial fullness, early satiety. **Refluks sympt**: Heartburn, regurgitation.
Alarm symptoms: dysphagia, odynophagia ; 51.1 % male; mean age 58.7 years)

Zagari 2010; Am J Gastroenterology

Dysfagi - differentialdiagnose

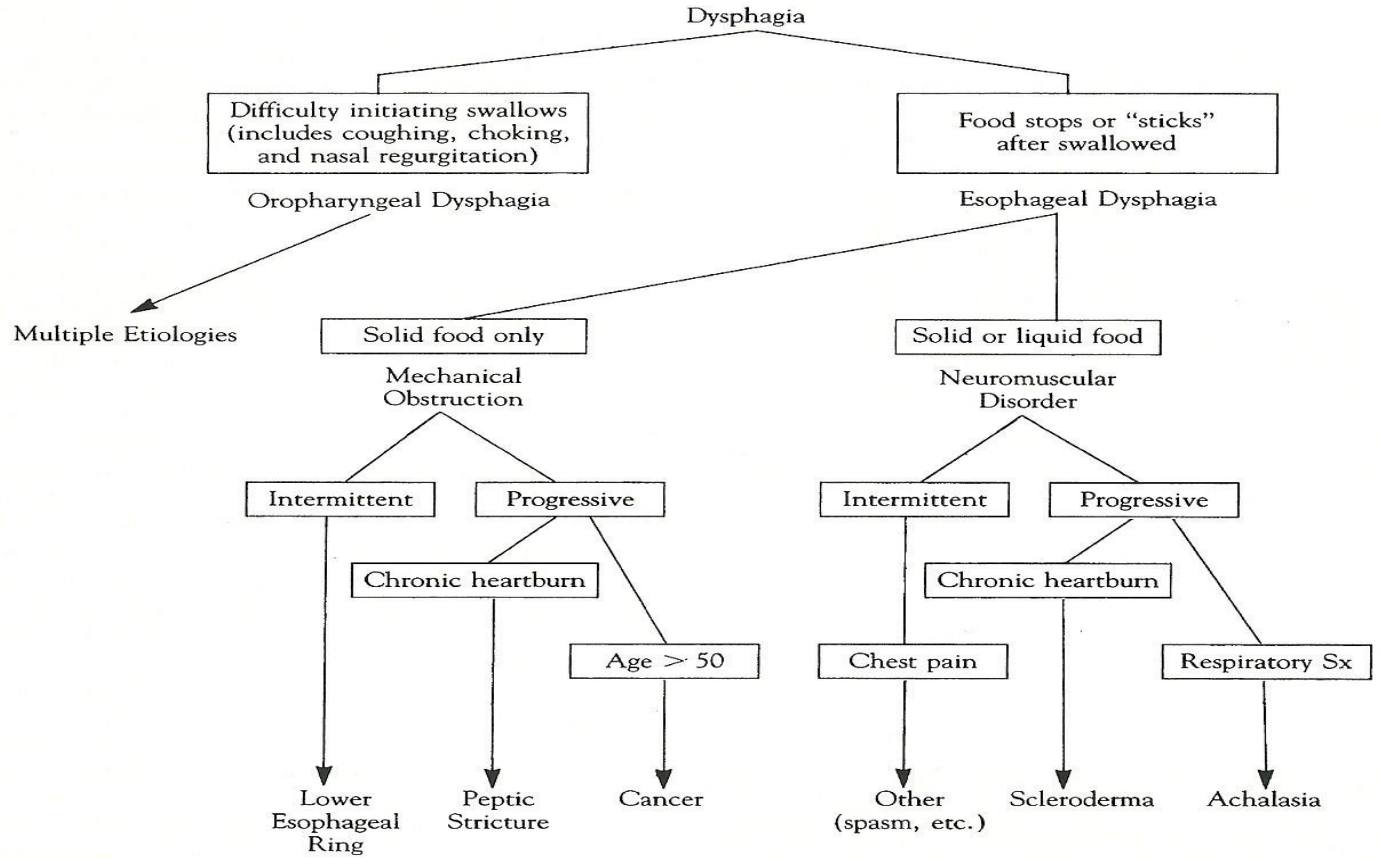

Figure 1.2 Algorithm for dysphagia (reproduced from Johnston BT, Castell DO. Symptom overview and quality of life. In: Castell DO, Richter JE, eds. *The Esophagus*, 4th edn. Philadelphia: Lippincott Williams & Wilkins, 2004:37–46).

(oro)pharyngeal or esophageal Structural or dysfunctional

I. Does the patient truly suffer from dysphagia or in fact from other deglutition-related symptoms, such as globus sensation, odynophagia, or xerostomia?

II. Is the dysphagia oropharyngeal or esophageal in origin?

more proximal but never further distal [1,3]. An esophageal obstruction can be misinterpreted as pharyngeal by about a quarter of patients [36,37].

III. Is the cause of dysphagia structural or dysfunctional?

Dysphagia for solids only may be indicative for structural impediments in the hypopharynx and particularly in the esophagus. Dysphagia for liquids and solids may rather indicate dysfunctional motility.

Kaindlstorfer A; Expert review of Gastroenterology and Hepatology, 2016

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University of california, USA, tertiary-care swallowing Center, 2013: 100 patients

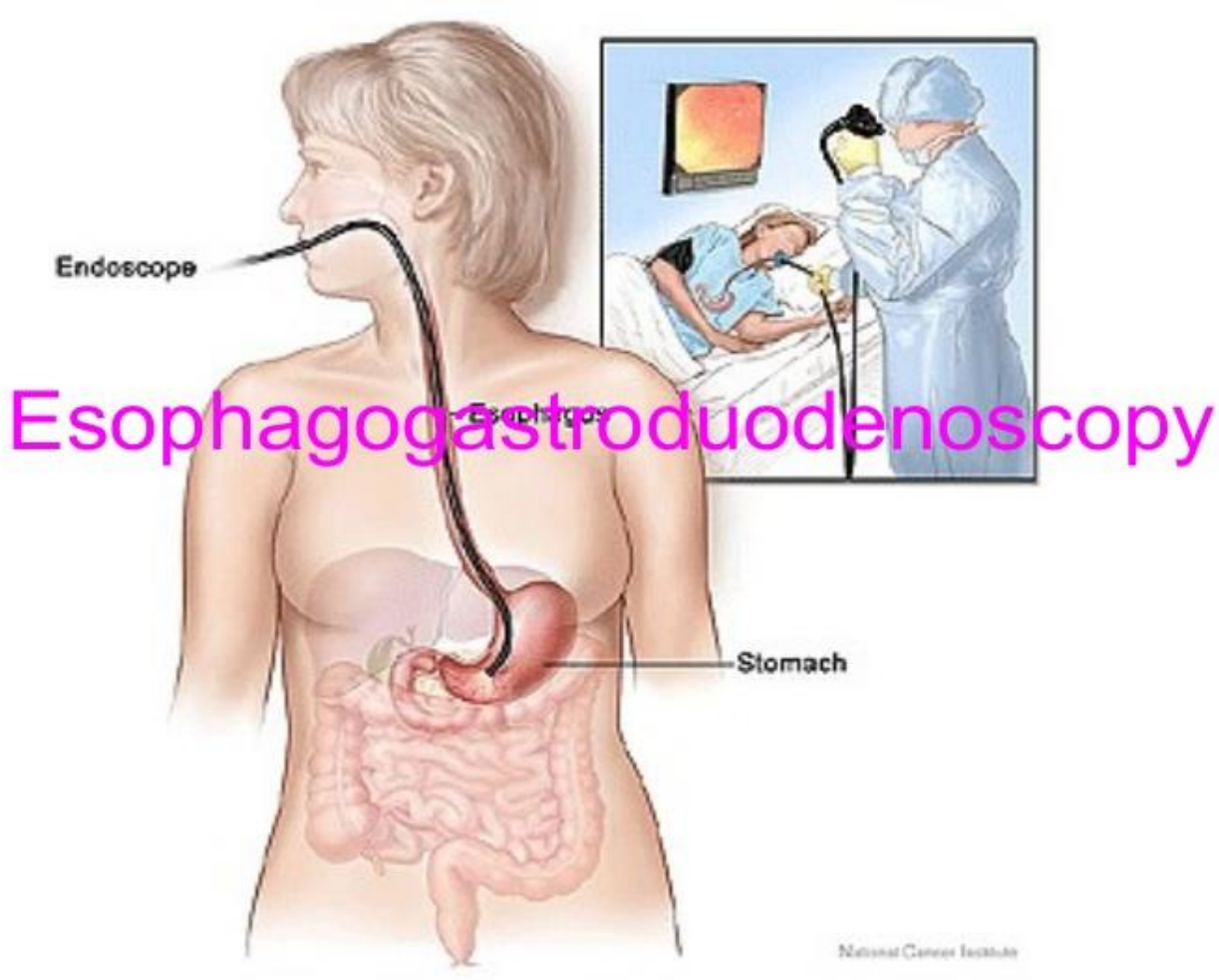
- ***Identified causes of dysphagia:***
- Gastroesopheal refluks 27%
- Postirradiation dysphagia 14%
- Cricopharyngeal muscle dysfunct 11%
- Unidentified 13%
- Zenkers diverticulum 6%
- Esophageal web 6%
- Esophageal dysmotility 4%
- Neurodegenerative disease 3%
- Postsurgical dysphagia 2%
- Other (achalasia, EoE, hiatal hernia, oropharyngeal mass) 8%

- ***Diagnostic work-up:***
- Flexible laryngoscopy (incl 17% FEES) 71%
- Dynamic fluoroscopy swallow test 45%
- Esophagoscopy 35%
- Barium esophagography 21%
- Manometry 10%
- pH and impedance testing 2%

Hoy M, 2013, Annals of Otology, Rhinology and Laryngology

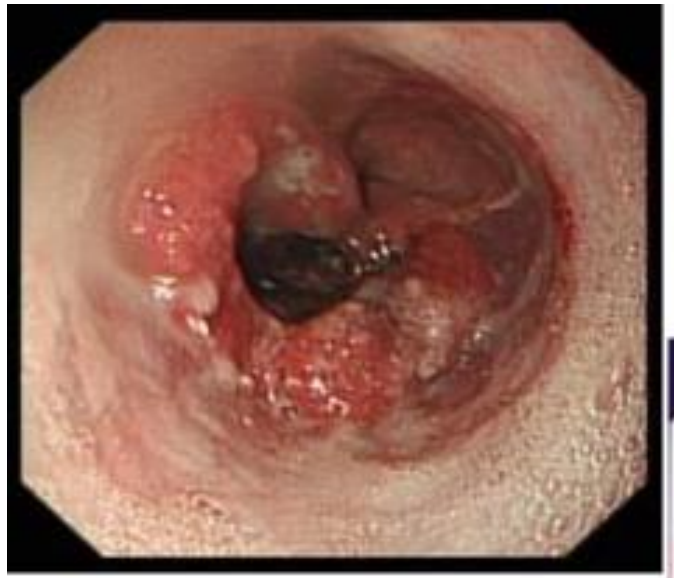
Undersøgelser

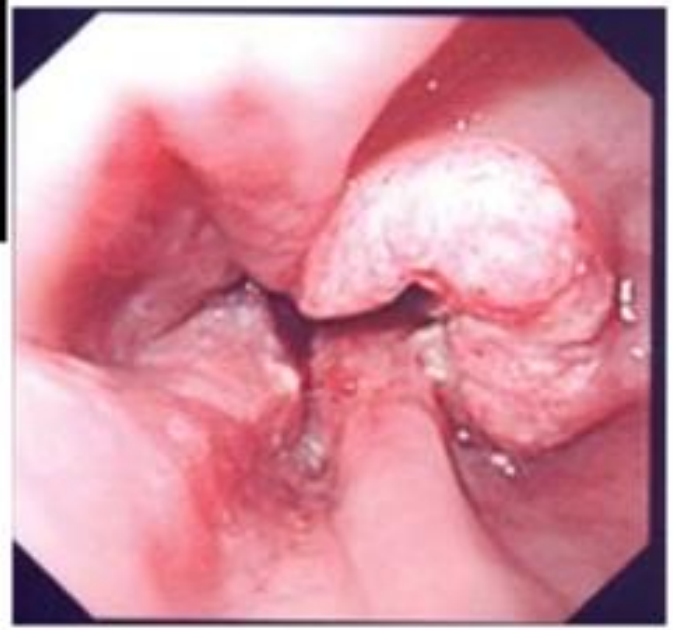
- ***Gastroskopi***
  - Alle pt.; cancer ?
- Videoradiologi
  - Motilitetsforstyrrelser, divertikel, striktur
- 24 timers ph og impedans (non-acid reflux)
  - refluks
- Manometri (trykmåling i esophagus)
  - Motilitetsforstyrrelser



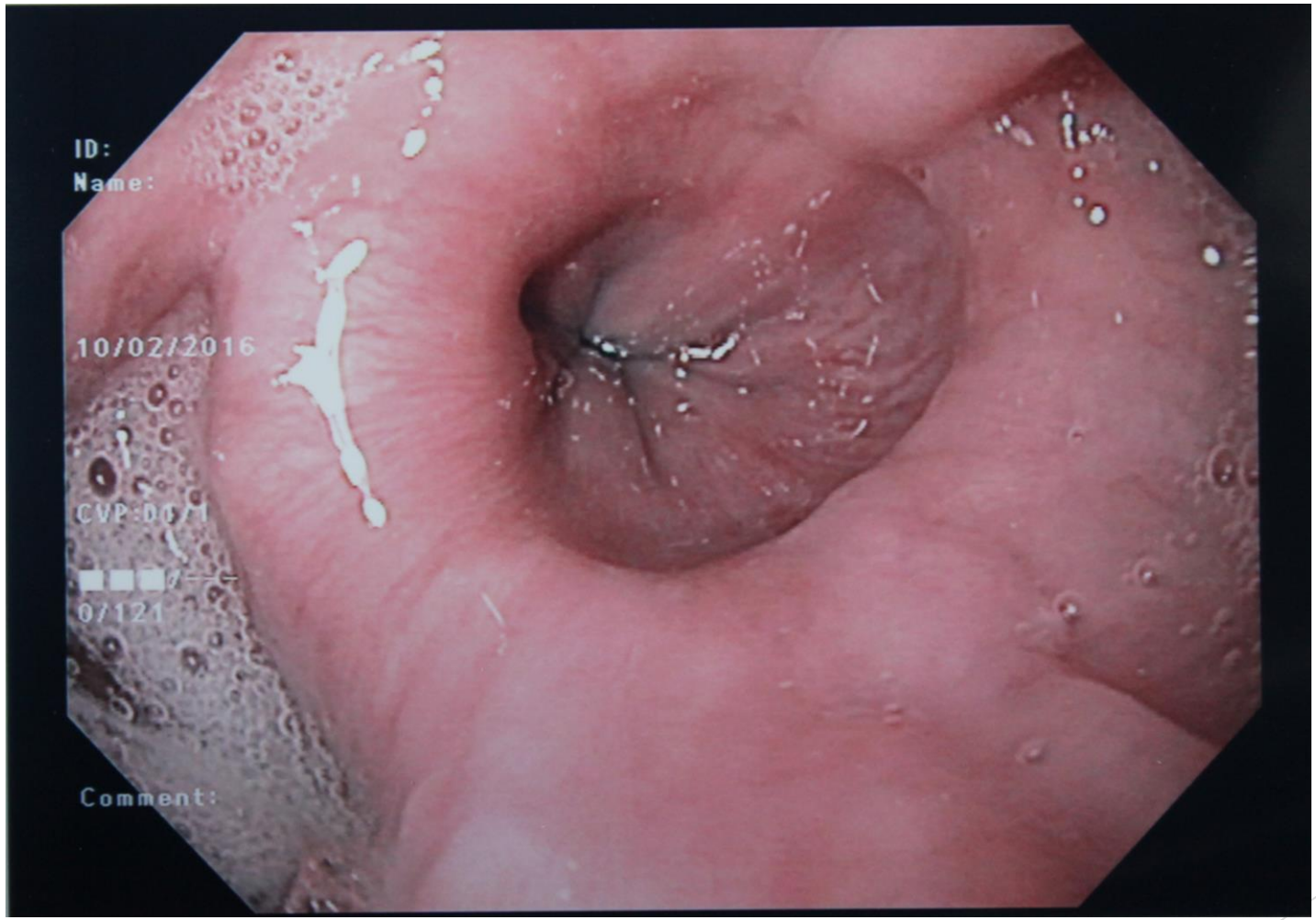
Esophagogastroduodenoscopy

Cancer esofagi





DES – diffus esofageal spasme



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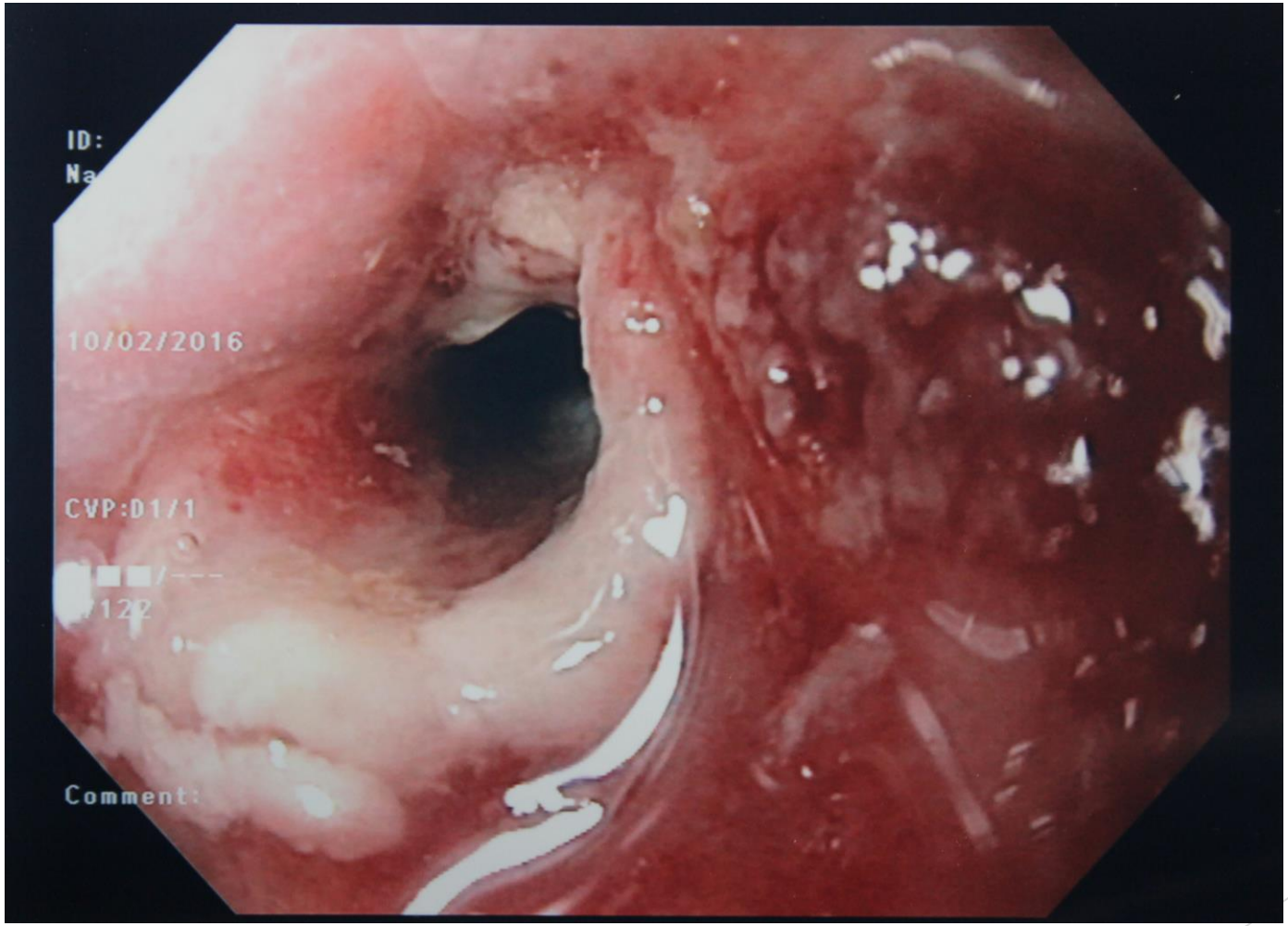
Refluks esofagitis



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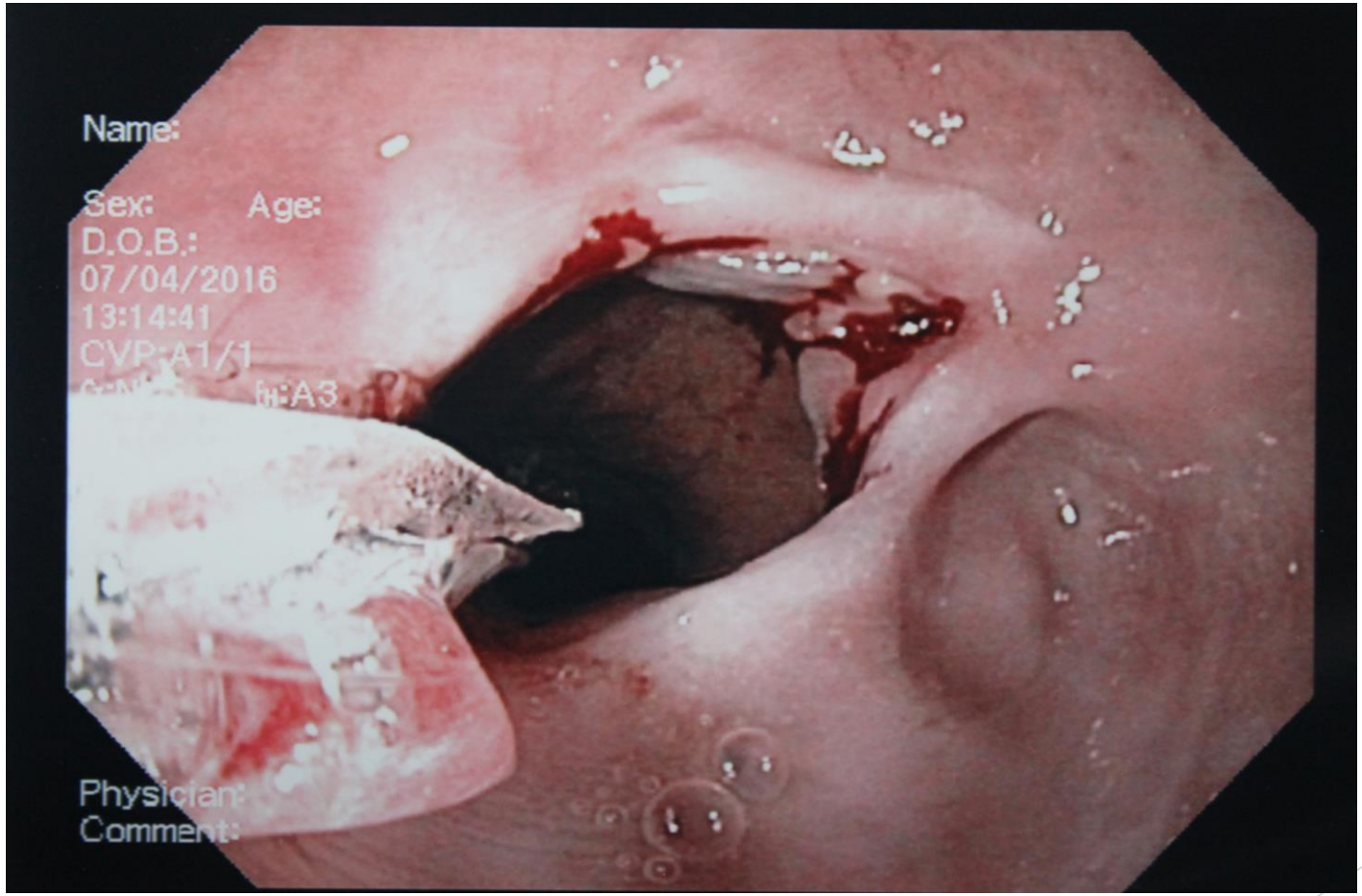
Schatzki ring



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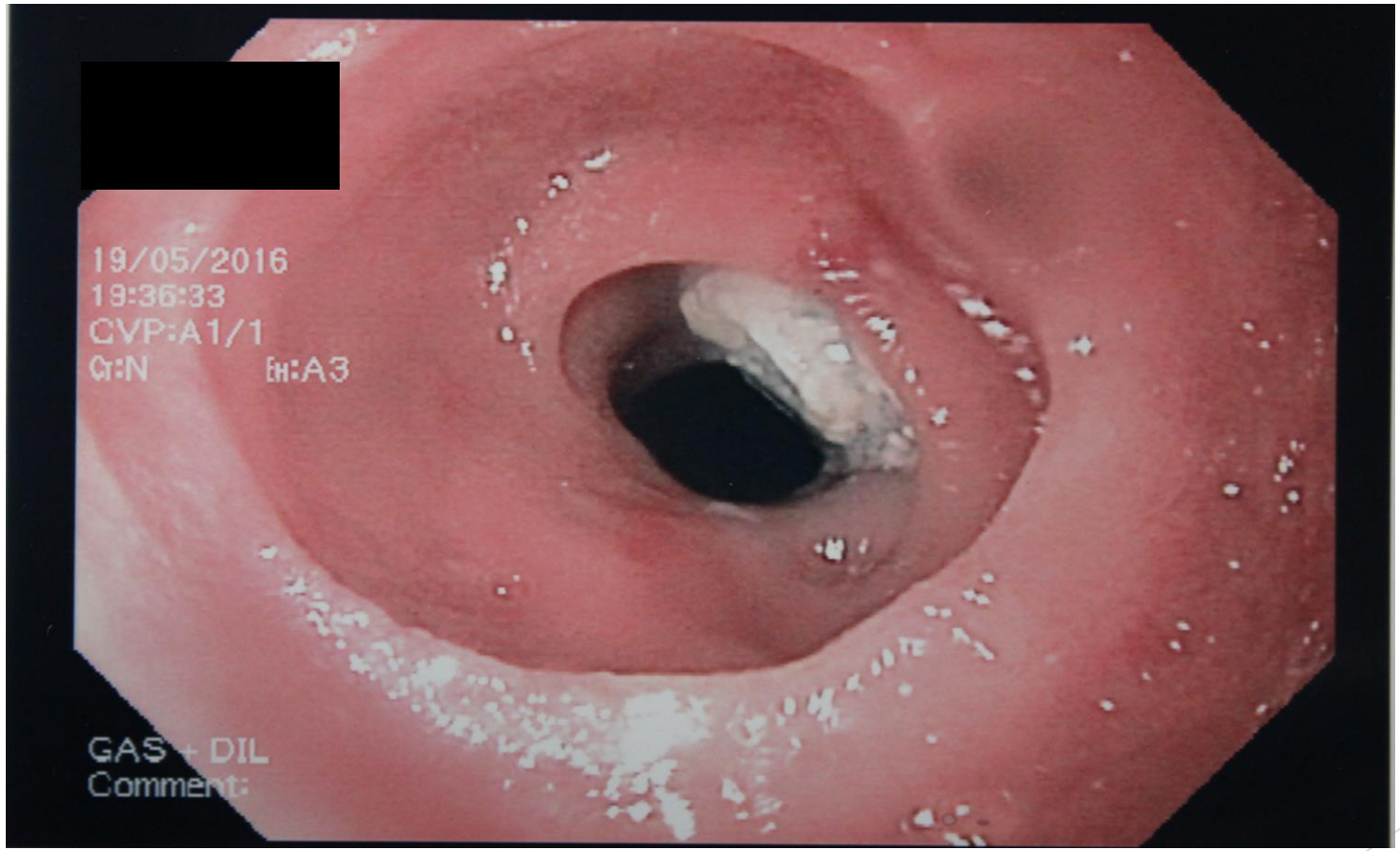
Tyndtarmsinterponat m talekanyle



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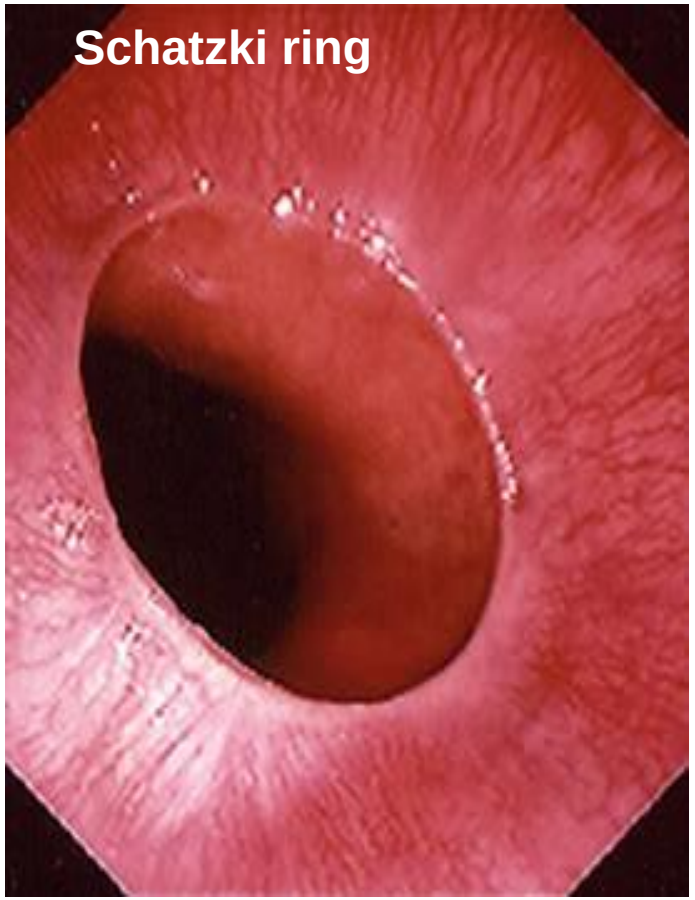
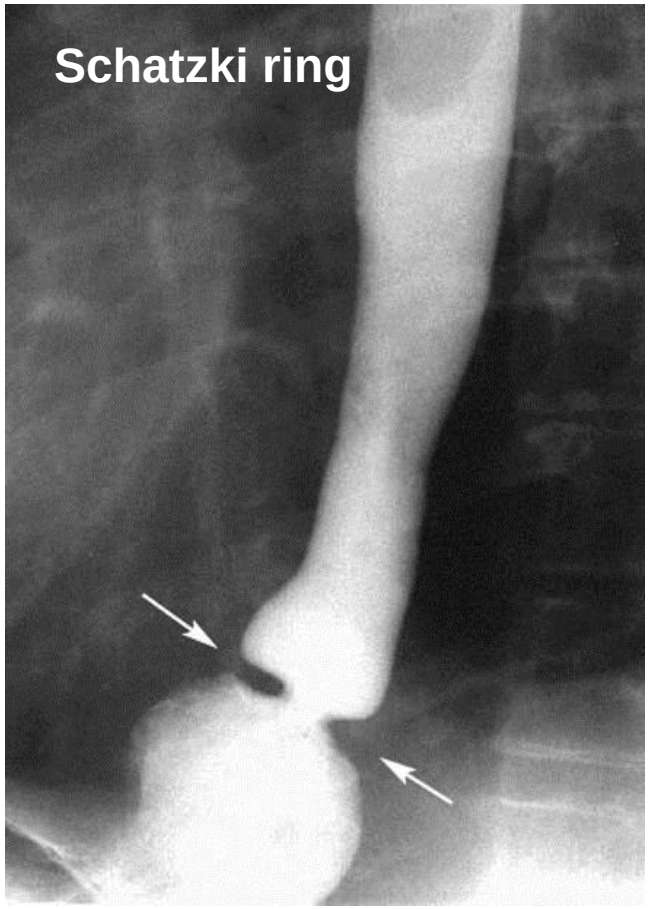
Undersøgelser

- Gastroskopi
  - Alle pt.; cancer ?
- ***Videoradiologi***
  - Motilitetsforstyrrelser, divertikel, striktur,
- 24 timers ph og impedans (non-acid reflux)
  - refluks
- Manometri (trykmåling i esophagus)
  - Motilitetsforstyrrelser


Schatzki ring


Schatzki ring

Undersøgelser

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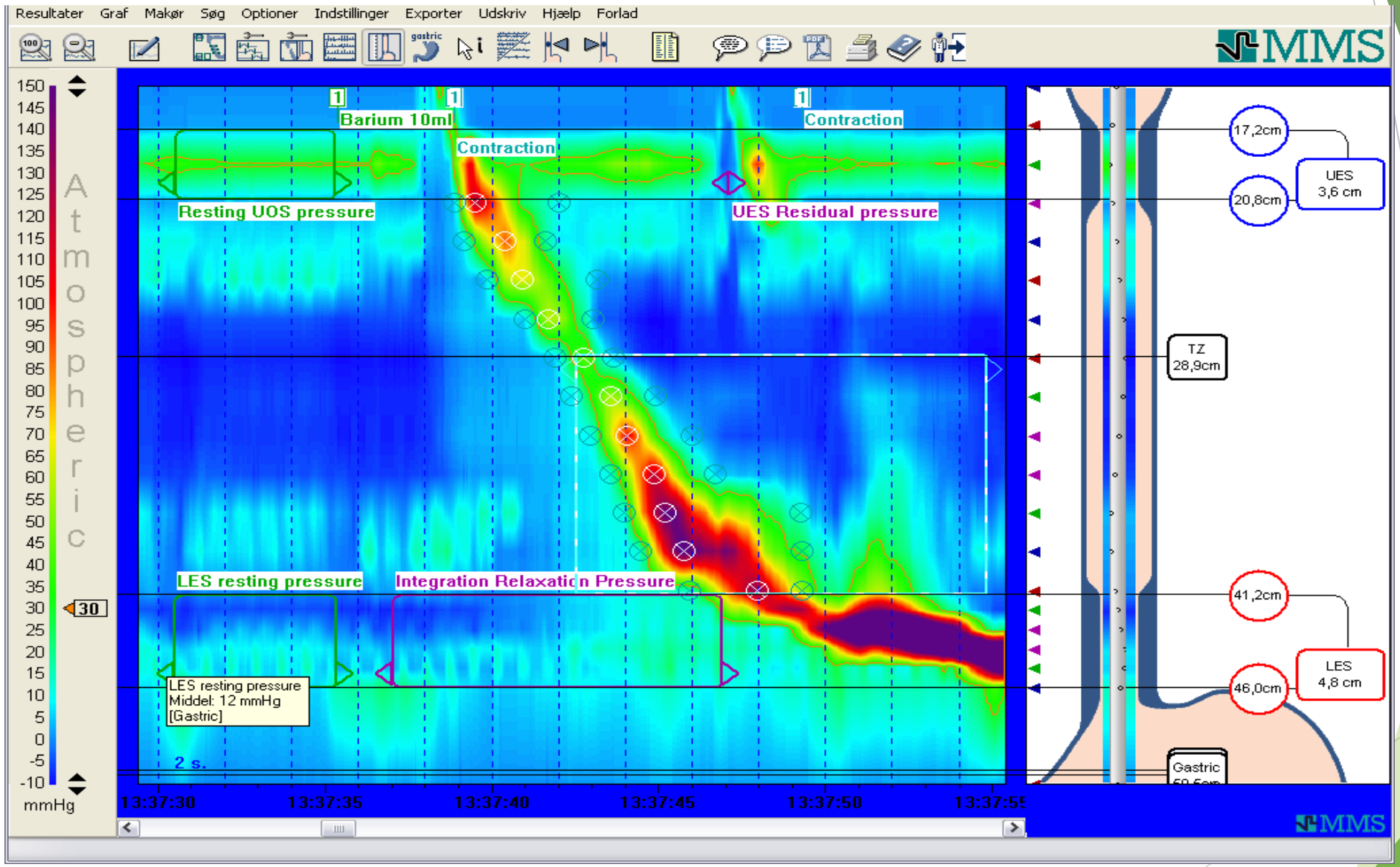
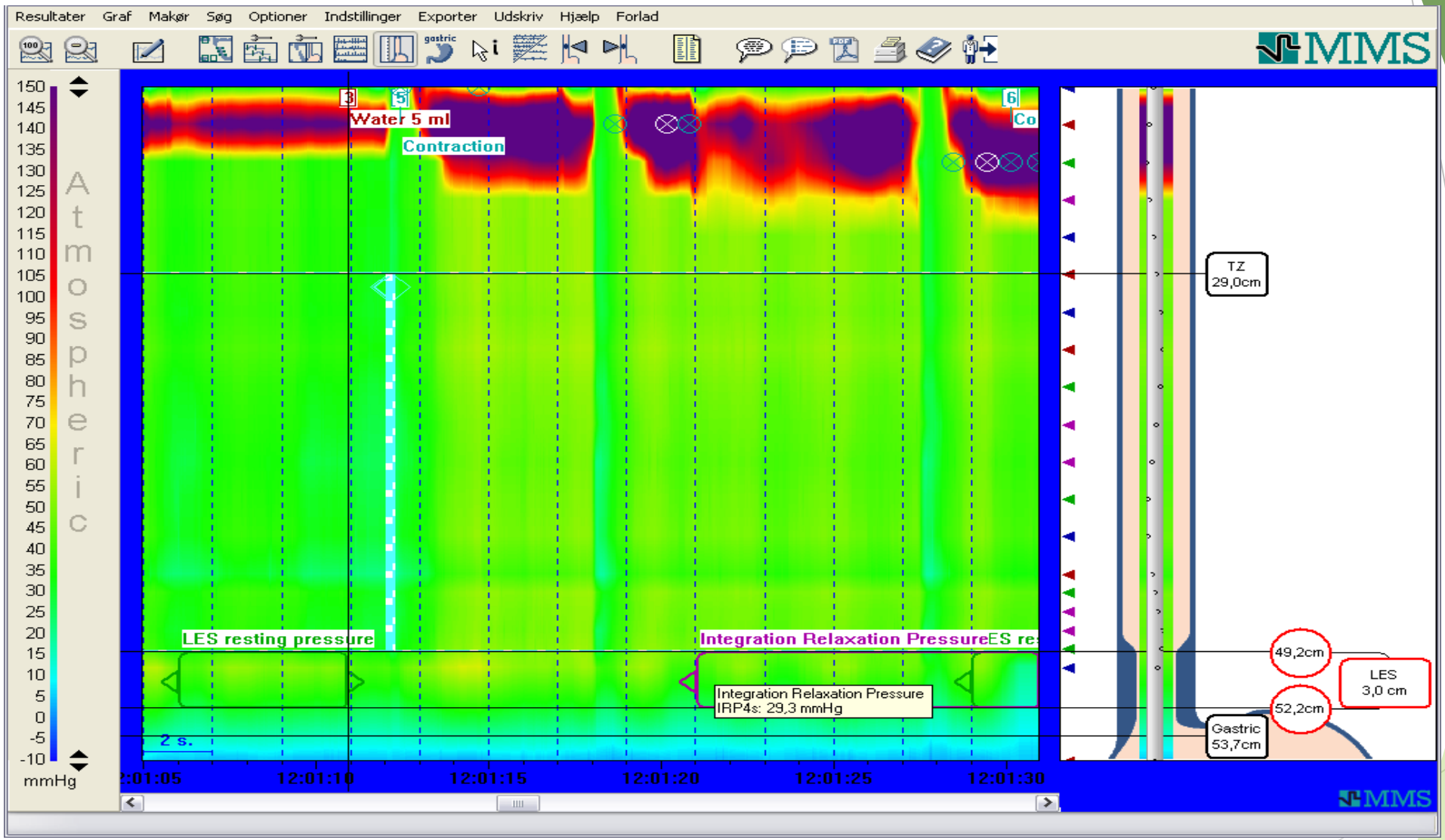
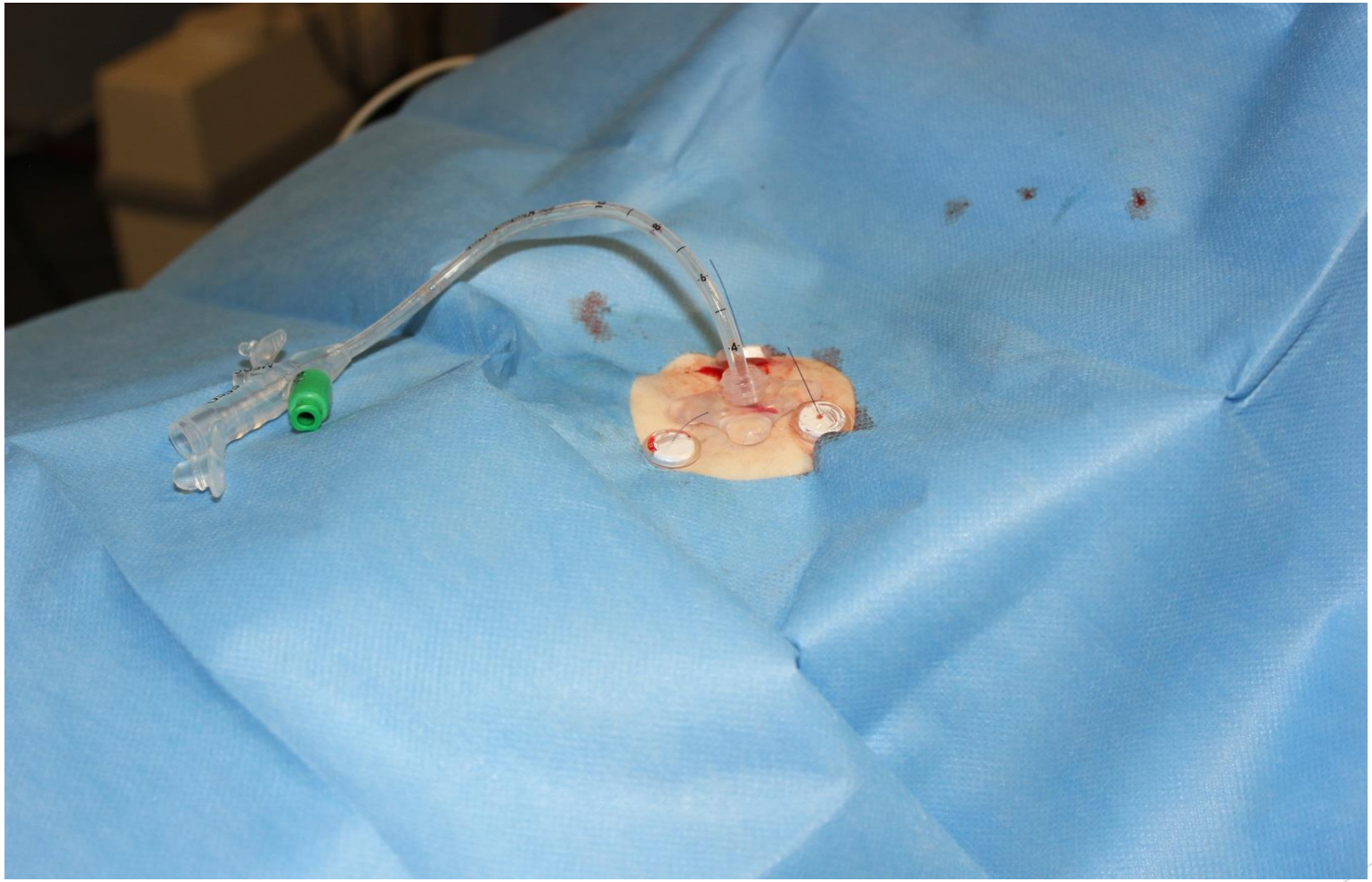
  - Motilitetsforstyrrelser, divertikel, striktur,
- 24 timers ph og impedans (non-acid reflux)
  - refluks
- ***Manometri (trykmåling i esophagus)***
  - Motilitetsforstyrrelser

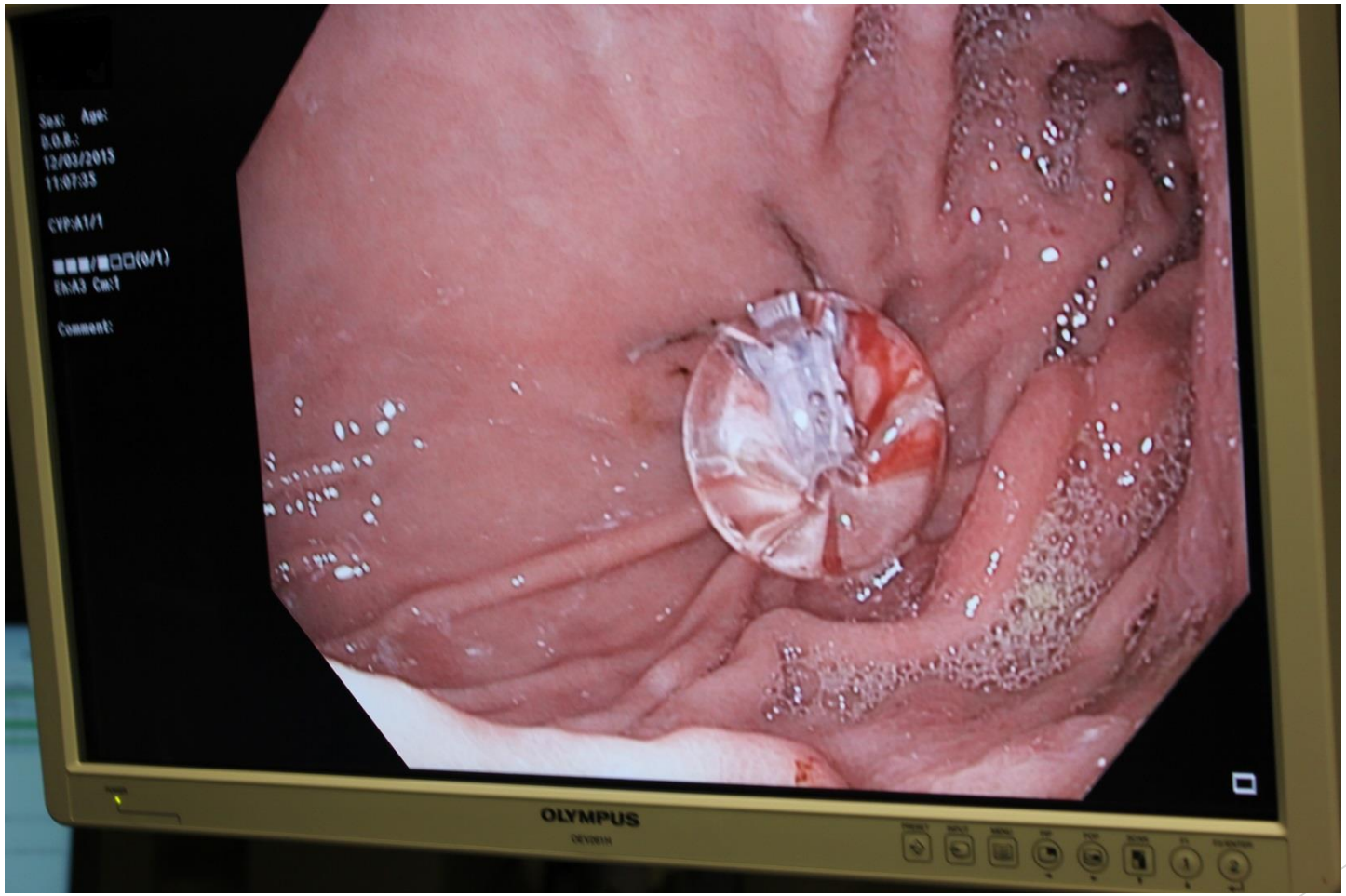

Resultater Graf Makør Søg Optioner Indstillinger Exporter Udskriv Hjælp Forlad
MMS
Barium 10ml
Contraction
Contraction
Resting UOS pressure
UES Residual pressure
LES resting pressure
Integration Relaxation Pressure
LES resting pressure
Middel: 12 mmHg
[Gastric]
2 s.
Atmospheric
mmHg
30
13:37:30
13:37:35
13:37:40
13:37:45
13:37:50
17,2cm
20,8cm
UES
3,6 cm
TZ
28,9cm
41,2cm
46,0cm
LES
4,8 cm
Gastric


Resultater Graf Makør Søg Optioner Indstillinger Exporter Udskriv Hjælp Forlad
MMS
Water 5 ml
Contraction
LES resting pressure
Integration Relaxation Pressure
Integration Relaxation Pressure
IRP4s: 29,3 mmHg
2 s.
Atmospheric
mmHg
TZ
29,0cm
49,2cm
LES
3,0 cm
52,2cm
Gastric
53,7cm
12:01:05
12:01:10
12:01:15
12:01:20
12:01:25
12:01:30

Achalasia

Slut




Sex: Age:
D.O.B.:
12/03/2015
11:07:35
CYP:A1/1
Eh:A3 Cm:7
Comment:
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