



# PNEUMOLOGIA 2018

## TUMORE POLMONARE E DINTORNI LA CHIRURGIA DELL'ESOFAGO

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14 Giugno 2018

# LA CHIRURGIA DELL'ESOFAGO

## Indice

- Stadiazione VIII Ed. (2017)
- Indicazioni terapeutiche



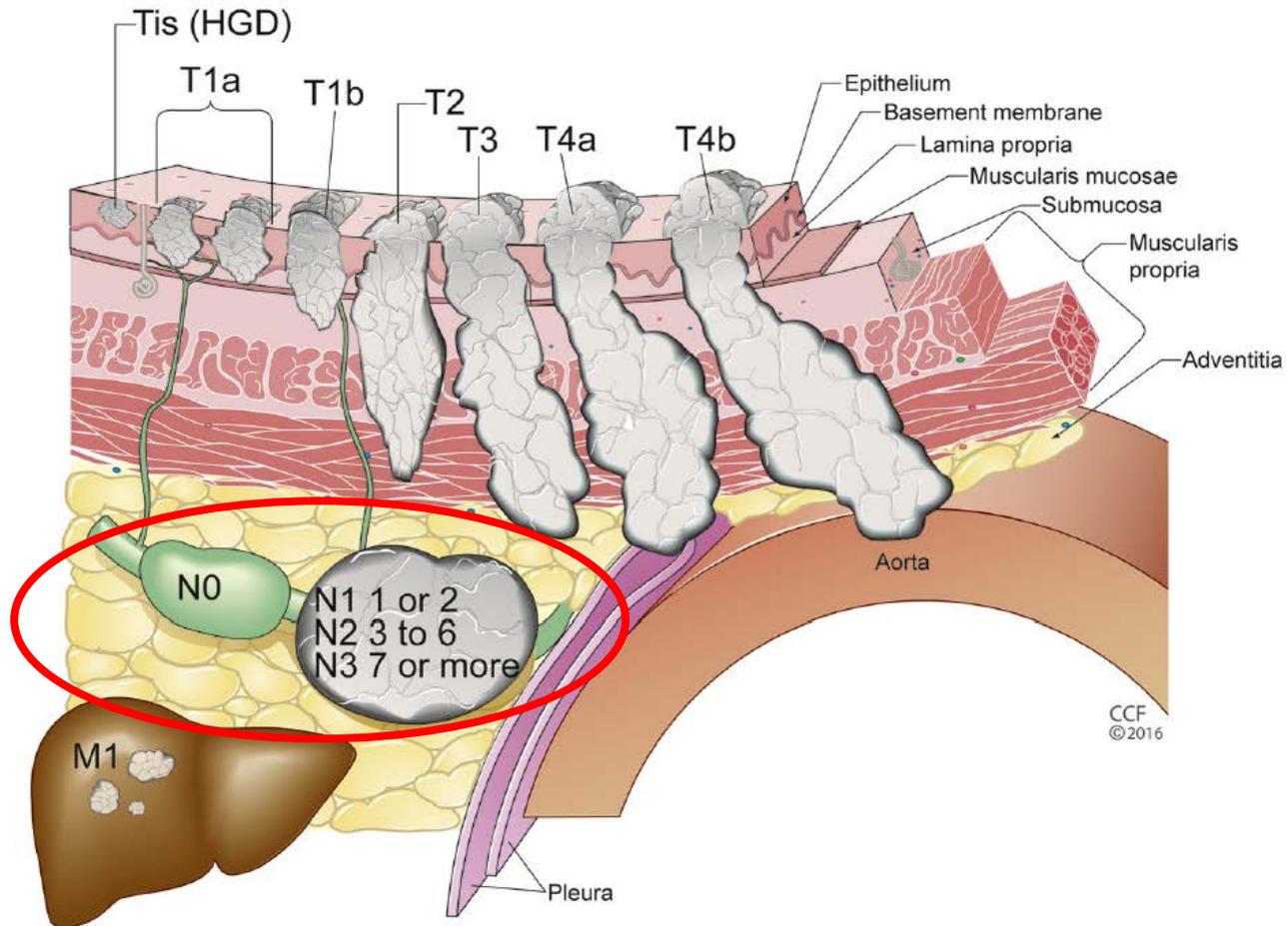
# Cancer of the Esophagus and Esophagogastric Junction: An Eighth Edition Staging Primer

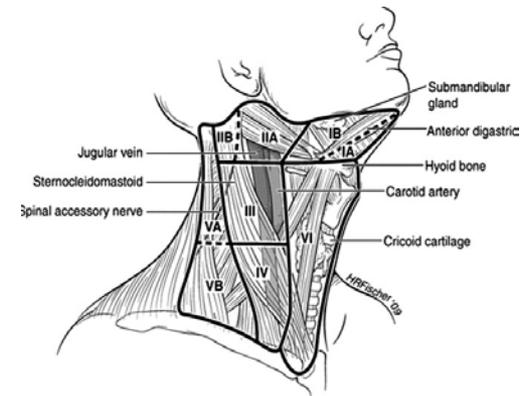
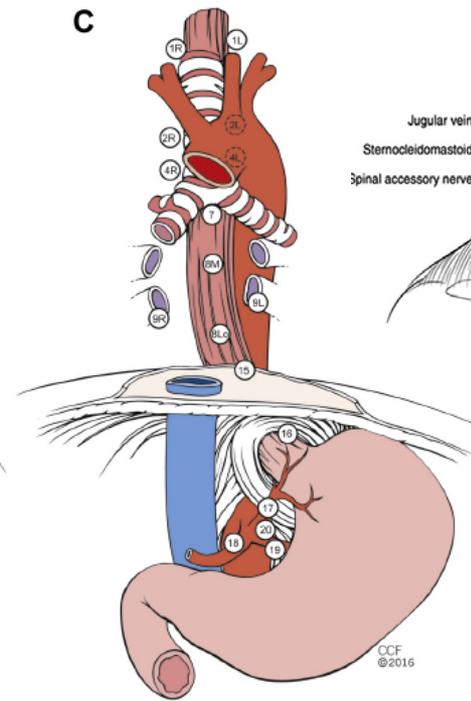
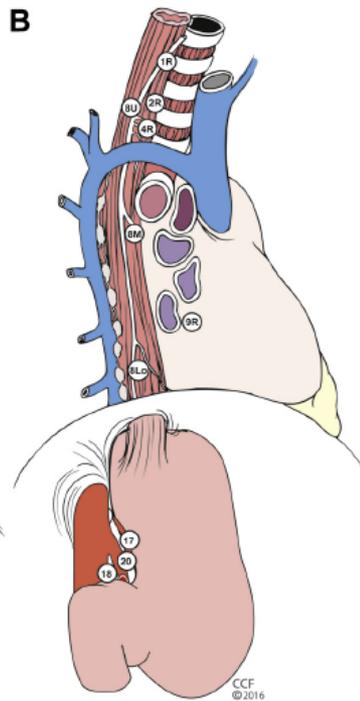
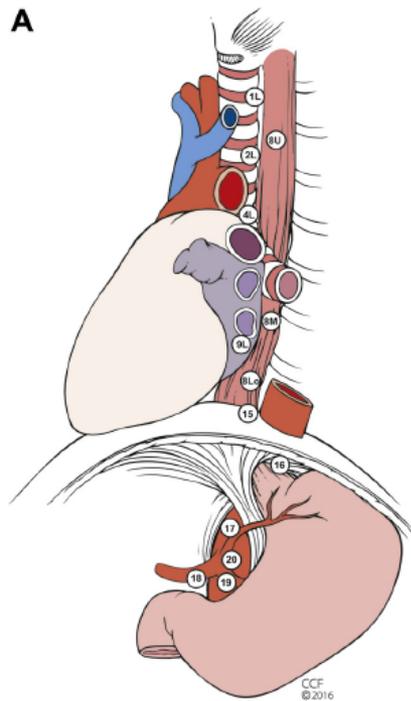
## **CATEGORIE**

- **TNM**
- **Sede**
- **Istologia**
- **Grading**

TW Rice et al.: JTO 12(1): 36-42, 2017

# TNM - VIII Edizione



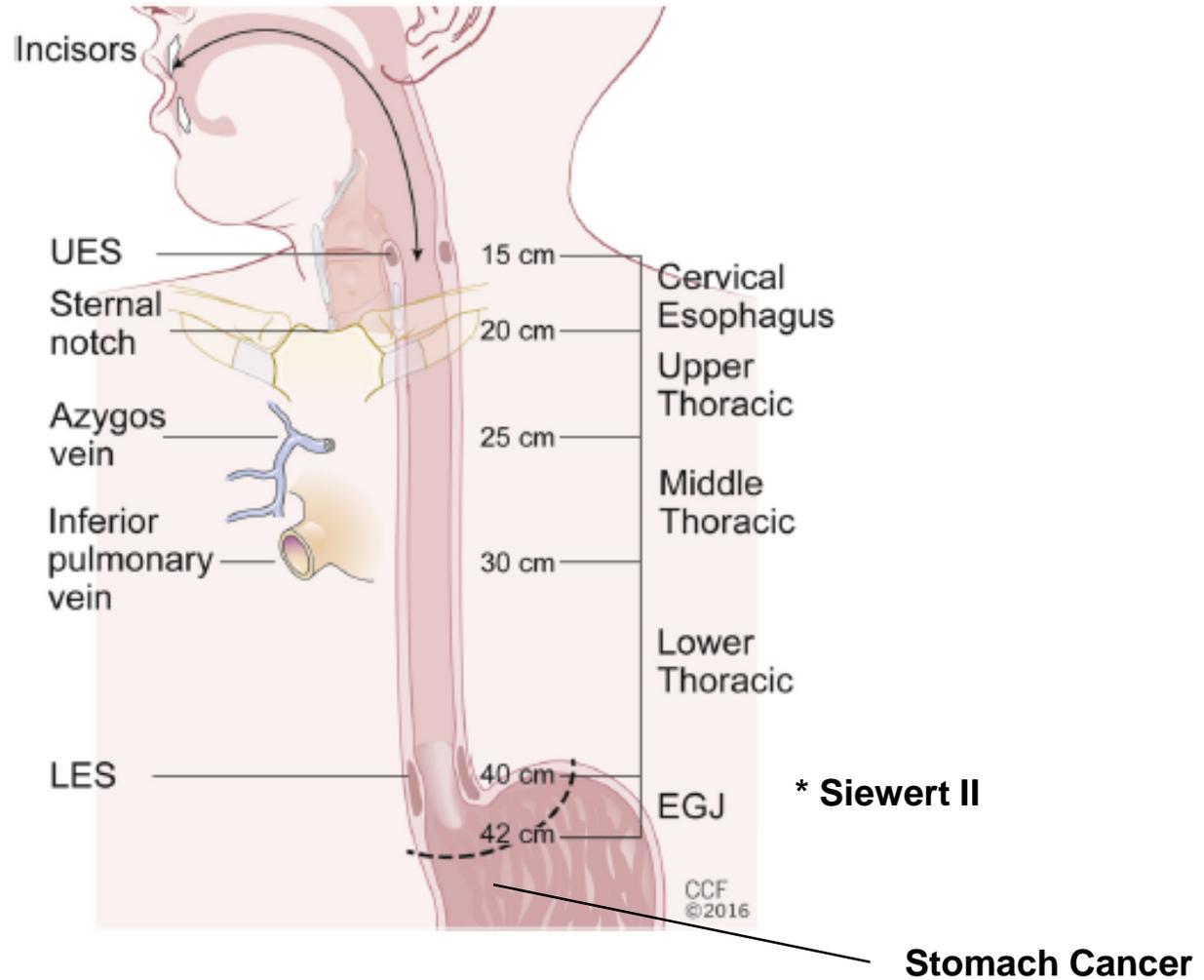


**\* I linfonodi pre- e paratracheali mediastinici superiori, craniali all'a. anonima sono riferiti al livello VII nella dissezione del collo**

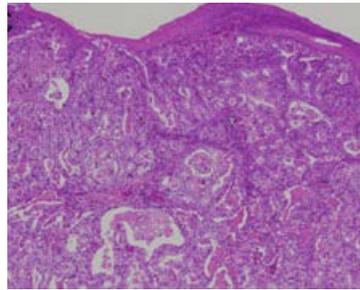
**TNM**  
**VIII Edizione**

Stazioni Linfonodali regionali:  
Livello VI, VII (periesofagei cervicali)\*  
1R, 1L, 2R, 2L, 4R, 4L, 7, 8U, 8M, 8Lo, 9R, 9L,  
15, 16, 17, 18, 19, 20,

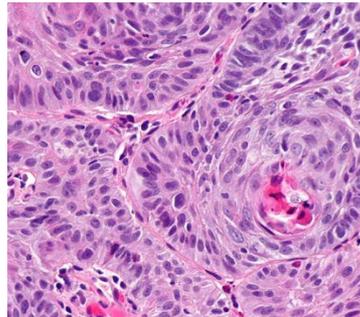
# Esophagus and Esophagogastric Junction Cancer \*



# Istologia



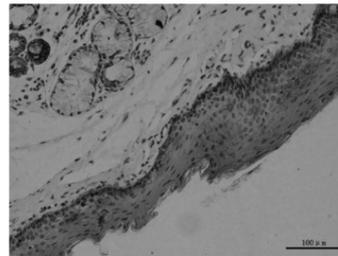
**Adenocarcinoma**



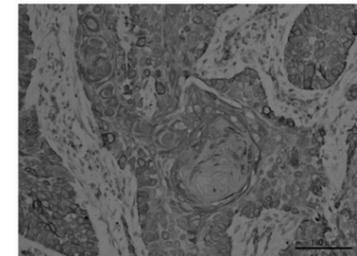
**Ca. Squamoso**

# Grading

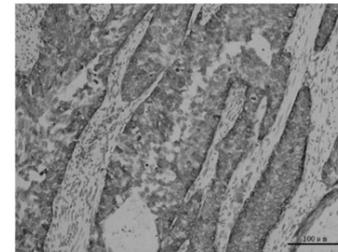
**Normal esophageal tissues**



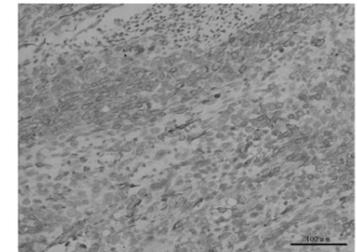
**Esophageal squamous cancer tissue grade I (well-differentiated)**



**Esophageal squamous cancer tissue grade II (moderately-differentiated)**



**Esophageal squamous cancer tissue grade III (poorly-differentiated)**



### A cTNM Adenocarcinoma

		N0	N1	N2	N3	M1
Tis	0					
T1		I	IIA	IVA	IVA	IVB
T2		IIB	III	IVA	IVA	IVB
T3		III	III	IVA	IVA	IVB
T4a		III	III	IVA	IVA	IVB
T4b		IVA	IVA	IVA	IVA	IVB

### B cTNM Squamous Cell Carcinoma

		N0	N1	N2	N3	M1
Tis	0					
T1		I	I	III	IVA	IVB
T2		II	II	III	IVA	IVB
T3		II	III	III	IVA	IVB
T4a		IVA	IVA	IVA	IVA	IVB
T4b		IVA	IVA	IVA	IVA	IVB

### A pTNM Adenocarcinoma

		N0	N1	N2	N3	M1
Tis	0					
T1a	G1	IA	IIB	IIIA	IVA	IVB
	G2	IB				
	G3	IC				
T1b	G1	IB	IIIA	IVA	IVB	
	G2	IC				
	G3	IC				
T2	G1	IC	IIIA	IIB	IVA	IVB
	G2	IIA				
T3	G1	IIB	IIB	IIB	IVA	IVB
	G2					
T4a	G1	IIB	IIB	IVA	IVA	IVB
	G2					
T4b	G1	IVA	IVA	IVA	IVA	IVB
	G2					

### B pTNM Squamous Cell Carcinoma

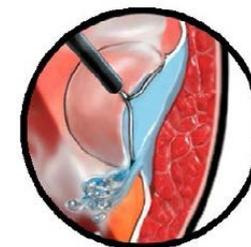
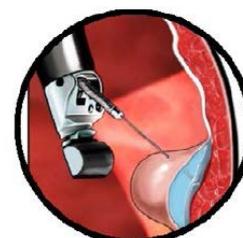
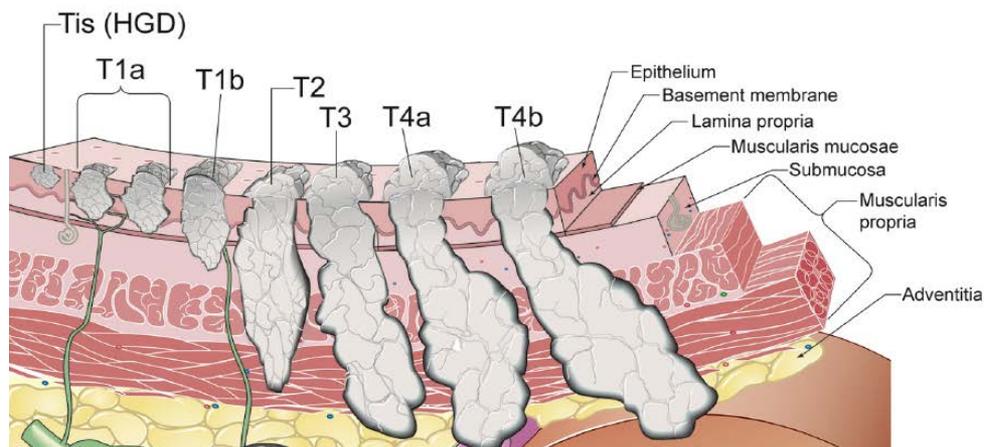
		N0		N1	N2	N3	M1
		L	U/M				
Tis	0						
T1a	G1	IA	IA	IIB	IIIA	IVA	IVB
	G2-3	IB	IB				
	T1b	IB					
T2	G1	IB	IB	IIIA	IIB	IVA	IVB
	G2-3	IIA	IIA				
	T3	G1	IIA	IIA	IIB	IIB	IVA
G2-3		IIA	IIB				
T4a	G1	IIB		IIB	IVA	IVA	IVB
	G2-3						
T4b	G1	IVA		IVA	IVA	IVA	IVB
	G2-3						

## ypTNM

	N0	N1	N2	N3	M1
T0	I	IIIA	IIIB	IVA	IVB
Tis	I	IIIA	IIIB	IVA	IVB
T1	I	IIIA	IIIB	IVA	IVB
T2	I	IIIA	IIIB	IVA	IVB
T3	II	IIIB	IIIB	IVA	IVB
T4a	IIIB	IVA	IVA	IVA	IVB
T4b	IVA	IVA	IVA	IVA	IVB

Postneoadjuvant pathologic stage groups (ypTNM):  
adenocarcinoma and squamous cell carcinoma

## Trattamento Indicato/Ammesso negli Stadi Molto Iniziali



**Tis: EMR (Endoscopic Mucosal Resection)**

**T1a: ESD (Endoscopic Submucosal Dissection)**

**± Terapie Complementari:**

**Crioablazione, Radiofrequenza, Ablazione Fotodinamica**

6 Treatment guide: Adenocarcinoma

Guide 15. Initial treatment

TNM scores	What are the options if approved and agree to have surgery?	What are the options if not approved or decline surgery?
Tis, N0, M0	<ul style="list-style-type: none"> <li>EMR or ESD,</li> <li>Ablation,</li> <li>EMR followed by ablation or ESD followed by ablation, or</li> <li>Esophagectomy</li> </ul>	<ul style="list-style-type: none"> <li>EMR or ESD,</li> <li>Ablation, or</li> <li>EMR followed by ablation or ESD followed by ablation</li> </ul>
T1a, N0, M0	<ul style="list-style-type: none"> <li>EMR or ESD,</li> <li>EMR followed by ablation or ESD followed by ablation, or</li> <li>Esophagectomy</li> </ul>	<ul style="list-style-type: none"> <li>EMR or ESD, or</li> <li>EMR followed by ablation or ESD followed by ablation</li> </ul>
Superficial T1b, N0, M0	<ul style="list-style-type: none"> <li>EMR followed by ablation or ESD followed by ablation, or</li> <li>Esophagectomy</li> </ul>	<ul style="list-style-type: none"> <li>EMR or ESD, or</li> <li>EMR followed by ablation or ESD followed by ablation</li> </ul>
All other T1b, N0, M0	<ul style="list-style-type: none"> <li>Esophagectomy</li> </ul>	<ul style="list-style-type: none"> <li>EMR or ESD, or</li> <li>EMR followed by ablation or ESD followed by ablation</li> </ul>



S  
U  
B  
M  
U  
C  
O  
S  
A

T2, N0, M0 T3, N0, M0 T4a, N0, M0 T1b, N+, M0 T2, N+, M0 T3, N+, M0 T4a, N+, M0	<ul style="list-style-type: none"> <li>Esophagectomy in some cases</li> <li>Chemoradiation to shrink cancer</li> <li>Chemotherapy to shrink cancer</li> <li>Chemotherapy before and after esophagectomy (perioperative)</li> <li>Chemoradiation to cure cancer if you don't want to have surgery</li> </ul>	<p><b>But able to have chemoradiation</b></p> <ul style="list-style-type: none"> <li>Chemoradiation to cure cancer</li> </ul> <p><b>And unable to have chemoradiation</b></p> <ul style="list-style-type: none"> <li>Supportive care with or without radiation therapy</li> </ul>
T4b, N+, M0	<ul style="list-style-type: none"> <li>Chemoradiation to cure cancer</li> </ul>	<ul style="list-style-type: none"> <li>Same as above</li> </ul>

# L'ESOFAGECOMIA CON OBIETTIVO DI RESEZIONE RADICALE E' IL TRATTAMENTO PRINCIPALE

## CHIRURGIA *D'EMBLÉE*

Ca. Squamoso Esofago Toracico

T1 N0 M0 G1

Adenoca. Esofago Toracico/Giunzione EG

T1 N0 M0 G1-2

Adenoca. (Casi Selezionati)

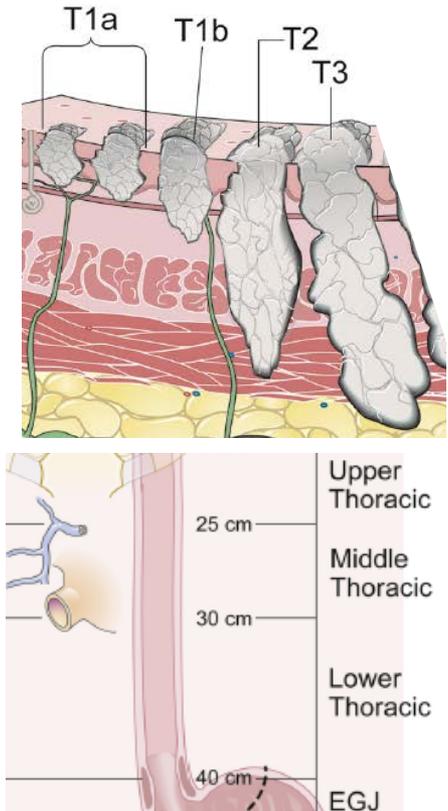
Esofago Toracico Distale/Giunzione EG

T1-3 N0 M0 G1-3

T1-2 N1 M0 G1-3

GLI ALTRI CASI (fino a T3 / N2):

- Terapia di Induzione (CT o CT-RT) e Chirurgia
- CT-RT Definitive con ev. Chirurgia "di Salvataggio"



# 1913: La prima Esofagectomia

## Franz J.A. Torek (1861-1938)

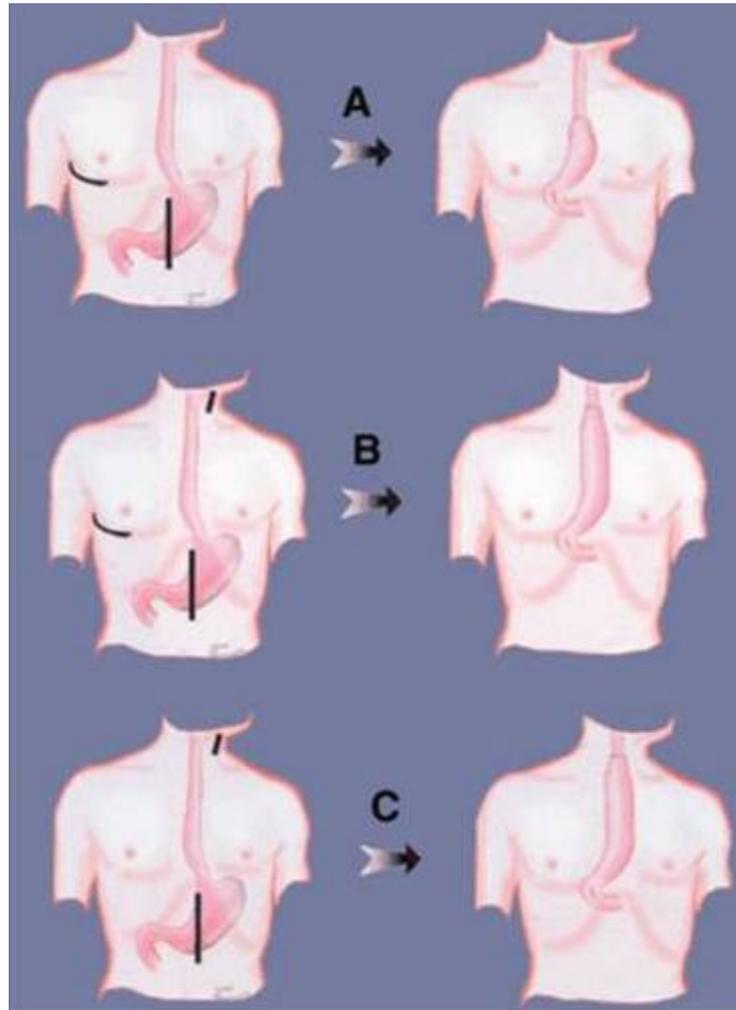


- Donna di 68 anni con carcinoma squamoso
- 1° tempo chir.: Gastrostomia
- 2° tempo chir.: Toracotomia sin. Resezione esofagea con esofagostomia prossimale ed affondamento del moncone distale.
  - Riparazione di lesione accidentale del bronco principale sinistro
  - Chiusura della toracotomia senza drenaggi
  - Durata dell'intervento: 2h 43'.
- Prima cura post-operatoria: clistere con caffè caldo, whisky, stricnina
- Sopravvivenza post-operatoria: 12 anni



**Mortalità  
postoperatoria  
nella  
successiva  
casistica  
(25 pts): 92%**

Ivor Lewis  
1946



Esofagectomia  
a 2 campi

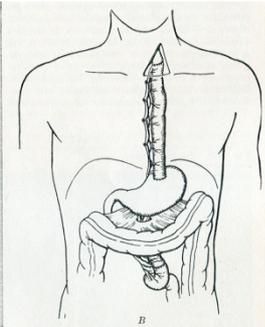
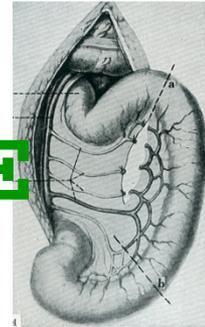
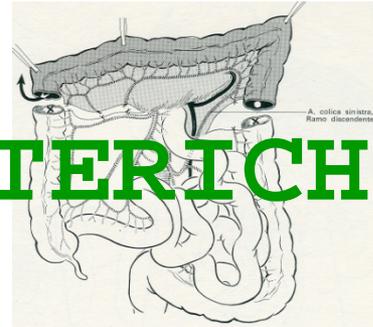
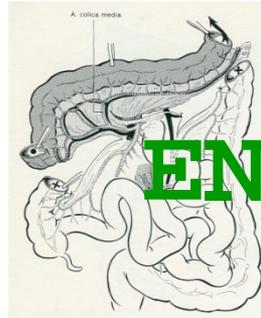
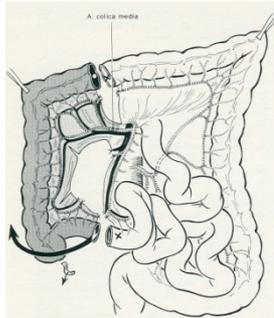
McKeown  
1976

Esofagectomia  
a 3 campi

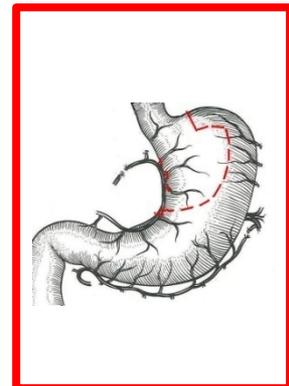
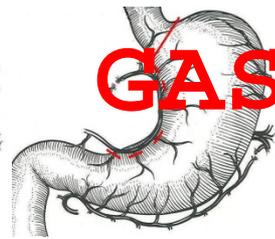
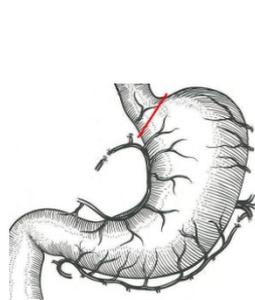
Turner 1933  
Orringer 1978

Esofagectomia  
senza  
toracotomia

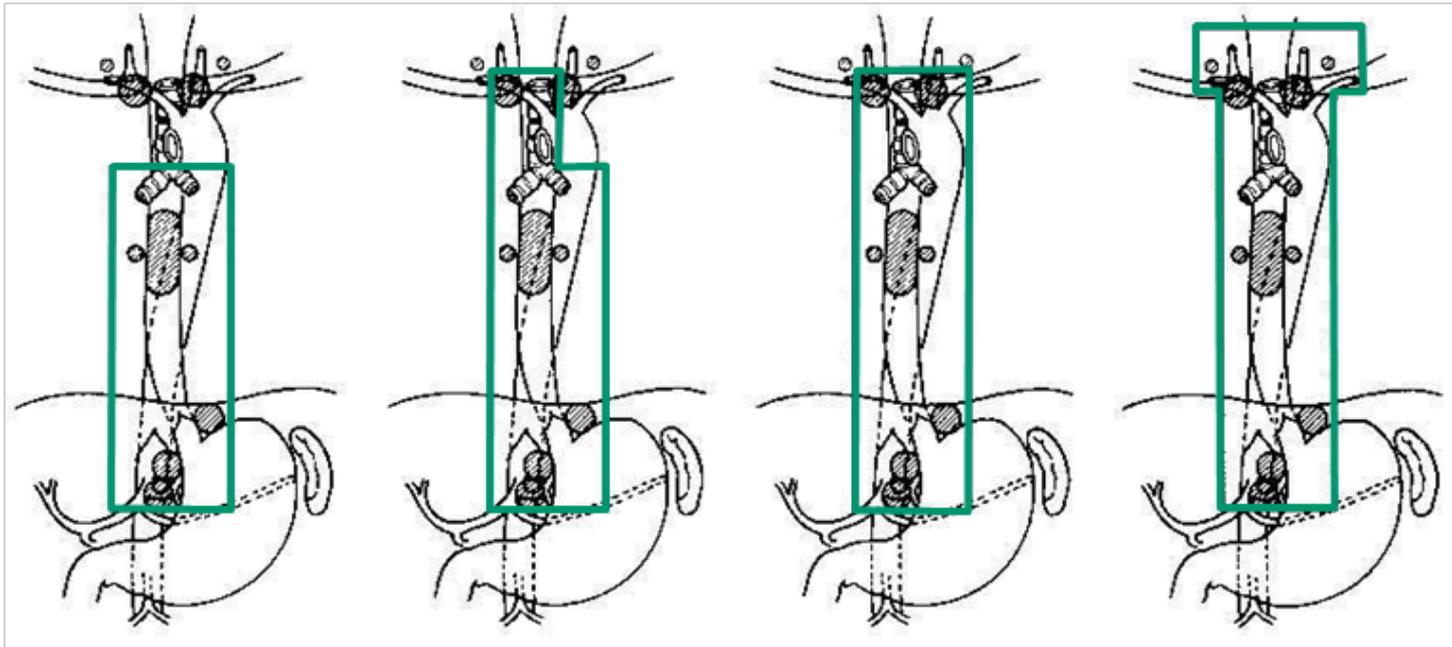
# ESOFAGOPLASTICHE



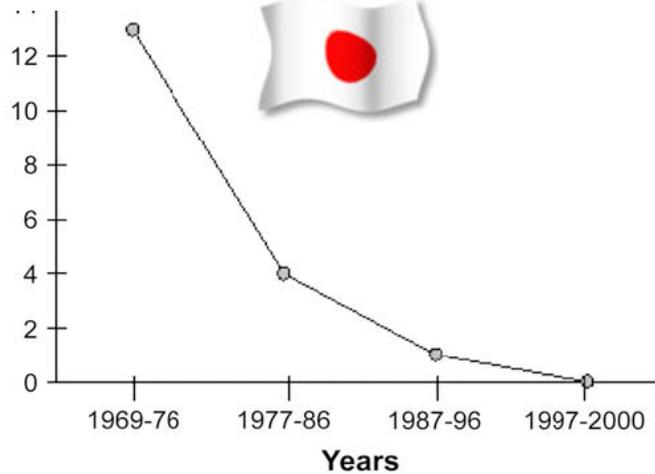
ENTERICHE



# VOLUME DI DISSEZIONE LINFONODALE



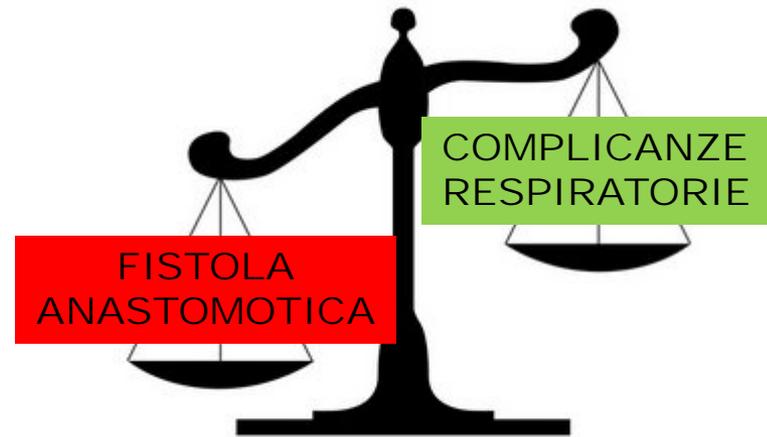
# MORTALITA' P.O.



Ohga T Surgery 2002

IERI

OGGI

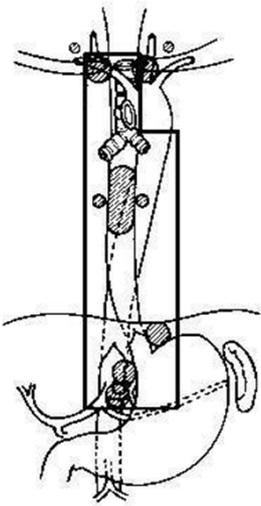


Gastroplastica  
Strumentazione  
Cure perioperatorie

# ESOFAGECTOMIA - MODERNE TENDENZE



**ESOFAGECTOMIA  
A TRE CAMPI**



**LINFADENECTOMIA "ESTESA"**



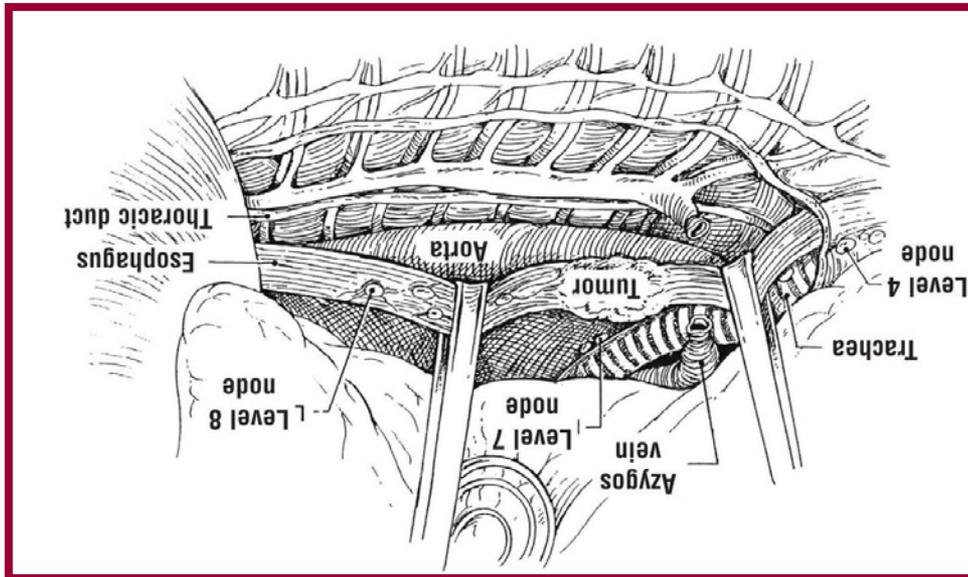
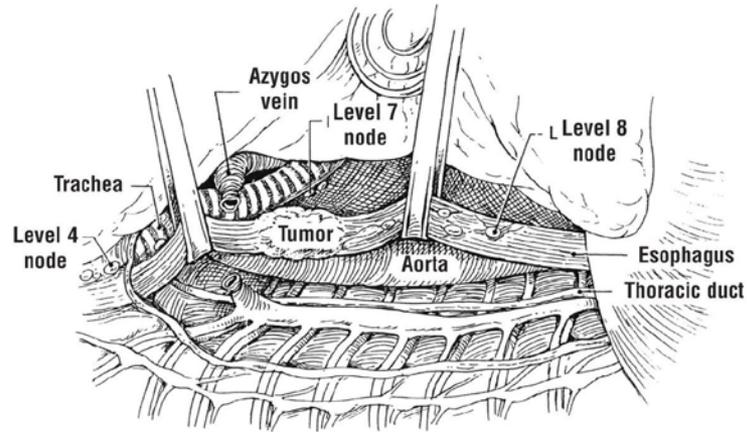
**APPROCCIO  
MININVASIVO**

**Minimally invasive techniques have**

- lower morbidity and mortality rate,**
- very satisfactory lymphnodes resection**
- similar long term outcomes in term of quality of life and survival**

**compared to results obtained by open surgery.**

Impact of minimally invasive surgery in the treatment of esophageal cancer  
I. Braghetto et al. 2014



**Visione in  
Toracosopia  
(Decubito Prono)**