Appropriatezza dell'Endoscopia nel Ca Gastrico



Prof. Matteo Neri

Dipartimento di Medicina e Scienze dell' invecchiamento, Università G. D' Annunzio Resp. UOSD Gastroenterologia ed Endoscopia Digestiva, Ospedale SS.Annunziata, Chieti

Overview of presentation

What should we do:

- Before Cancer
 - Endoscopy in precancerous condition (atrophic gastritis and metaplasia/dysplasia)
- At Endoscopy
 - superficial neoplastic lesions of the stomach:
 Diagnosis,Treatment ,Follow-up
- After Gastric Surgery
 - Follow-up

Gastric cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up



E. C. Smyth et al, Ann Oncol 2016

The principal cause of Gastric Cancer is *H. Pylori*



The OLGA/OLGIM score



ATROPHY SCORE Score 0: no atrophic glands Score 1: 1–30% of atrophic glands Score 2: 31–60% of atrophic glands Score 3: >60% of atrophic glands		No atrophy (score 0)	CO Mild atrophy (score 1)	RPUS Moderate atrophy (score 2)	Severe atrophy (score 3)
Ţ	No atrophy (score 0) (including incisura angularis)	STAGE 0	STAGE 1	STAGE II	STAGE II
ANTRUM	Mild atrophy (score 1) (including incisura angularis)	STAGE I	STAGE I	STAGE II	STAGE III
	Moderate atrophy (score 2) (including <i>incisura angularis</i>)	STAGE II	STAGE II	STAGE III	STAGE IV
	Severe atrophy (score 3) (including <i>incisura angularis</i>)	STAGE III	STAGE III	STAGE IV	STAGE IV

Management of precancerous conditions in the stomach



How to do it



Gastric Cancer detection rates



Metodologia di esplorazione del tratto digestivo alto: SSS



Yao K et al, Ann Gastroenterol 2013





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

Domain: completeness of procedure

- A UGI endoscopy in a patient who has not undergone a previous gastroscopy within the last three years should include inspection of the esophagus, stomach, and duodenum, and should last for at least seven minutes from intubation to extubation.

(N2.2) Agreement: 80%.

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Longer Examination Time Improves Detection of Gastric Cancer During Diagnostic Upper GI Endoscopy



Teh Jl et al, CGH 2015

How to improve visualization: Chromoendoscopy with indigo carmine



GRANULARITY AND VASCULAR TRIMMING

II a LESION

Technology is important!





Magnifying Endoscopy Simple Diagnostic Algorithm for Gastric Cancer (MESDA-G)





Inflammation



Atrophy



Advanced inflammation



Metaplasia









Inside the demarcation line : regular microvascular, regular microsurface patterns





irregular microsurface and irregular microvascular patterns are present within the demarcation line



Vessels plus Surface (VS) classification system



Muto M et al, Dig Endoscopy 2016

Paris classification: Stomach EGC and Nodal invasion



Gastrointestinal Endoscopy, 2003

Depth of infiltration and invasion

Mucosa Lamina propria Muscularis mucosae

Submucosa

Muscularis propria

Serosa

HGD MI	EGC IM M2	EGC IM M3	EGC SMI v- I-		
S	SM 1				
SM 2					
•					

pT Stage	N+ %
M1	0
M2	0-1
M3	2
SM1	2-3
SM2	25-27

Paris classification: Stomach EGC and Nodal invasion

Size & Submucosal invasion

Ulcer +/-

Size in mm	<500 μn/N (%)	>500 μn/N (%)
<10	1/31 (3)	5/39 (13)
10-20	4/71 (6)	28/195 (14)
21-30	4/71 (6)	52/273 (19)
>30	6/92 (7)	86/319 (27)
Total	15/265 (6)	171/826 (21)









GastrointestinalEndoscopy, 2003

Endoscopic submucosal dissection: European Society of Gastrointestinal Endoscopy (ESGE) Guideline



Superficial neoplastic lesions of the stomach

ESGE recommends endoscopic resection for the treatment of gastric superficial neoplastic lesions that possess a very low risk of lymph node metastasis (strong recommendation, high quality evidence)

EMR is an acceptable option for lesions smaller than 10-15mm with a very low probability of advanced histology (Paris 0-IIa)

Indication to endoscopic resection according to the risk of lymph node metastasis

Depth of invasion	Ulceration	Differentiated		Undifferentiated	
		≤ 2cm	> 2cm	≤ 2cm	> 2cm
$T_{12}(N_{1})$	UI -				
1 1d (IVI)		≤ 3cm	> 3cm		
	UI +				
T1b (SM)		sm1,≤500µm			
Dysplasia					
Absolute indication			Expanded	indication	

Pimentel-Nunes P et al Endoscopy 2015

Staging





Protrusion or depression of a smooth

surface

Slight marginal elevation

Smooth tapering of converging folds

Irregular surface, marked marginal elevation,

abrupt cutting or fusion of converging folds.

Endoscopic Mucosal Resection v. Submucosal Dissection



Outcomes of endoscopic submucosal dissection (ESD) for gastric superficial lesions



Outcomes of endoscopic submucosal dissection (ESD) for gastric superficial lesions



Outcomes of endoscopic submucosal dissection (ESD) vs mucosa resection (EMR)



Outcomes of endoscopic submucosal dissection (ESD) vs mucosa resection (EMR)



Facciorusso A et al: WJGE 2014

Outcomes of ESD vs. EMR Survival rate



Tanabe S. et al. Gastric Cancer 2014

Critical issues

- *H.pylori* infection
- Survival rate >5aa
- Age of patients
- Metachronus lesions (vs. surgery)
- Expanded indication
- Cancer histology
- Long Follow-up (number of EGDS?)

ESD versus surgical resection for EGC



Ryu SJ et al. Surg Endosc 2016

Outcomes of ESD for differentiated-type early gastric cancer with histological heterogeneity







Expandend indications

Min BH et al, Gastric Cancer 2015

ESD and Follow-up: 6 vs 12 months



Nakajima T et al., Gastric Cancer 2006

clinical practice guidelines

Gastric cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up[†]

E. C. Smyth¹, M. Verheij², W. Allum³, D. Cunningham⁴, A. Cervantes⁵ & D. Arnold⁶ on behalf of the ESMO Guidelines Committee^{*}

Follow-up, long-term implications and survivorship

- A regular follow-up may allow investigation and treatment of symptoms, psychological support and early detection of recurrence, though there is no evidence that it improves survival outcomes [III, B]
- Follow-up should be tailored to the individual patient and the stage of the disease [V, B]
- Dietary support is recommended for patients on either a radical or a palliative pathway, with reference to vitamin and mineral deficiencies [V, B]
- In the advanced disease setting, identification of patients for second-line chemotherapy and clinical trials requires regular follow-up to detect symptoms of disease progression before significant clinical deterioration [IV, B]
- If relapse/disease progression is suspected, then a clinical history, physical examination and directed blood tests should be carried out. Radiological investigations should be carried out in patients who are candidates for further chemotherapy or RT [IV, B]



Management clinico-endoscopico dell'EGC

