Il referto istologico dei tumori T1 nella gestione clinica dei pazienti

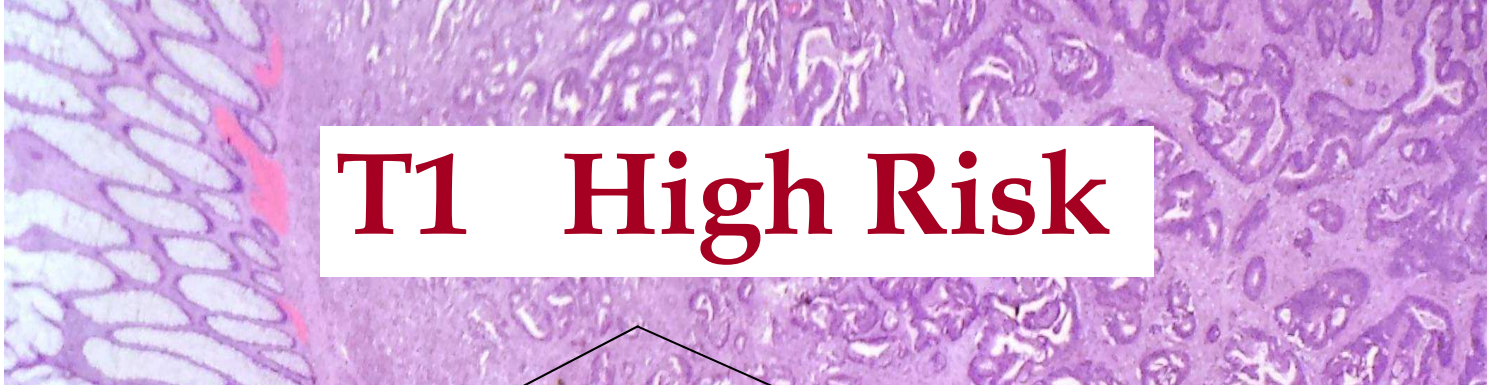
Paola Cassoni

La diagnosi standardizzata dei T1

Best practice nel report istologico:
la refertazione utile alla gestione del paziente deve prevedere l'inclusione di tutti i parametri necessari per la scelta chirurgia vs non chirurgia

Alto rischio vs basso rischio

I requisiti minimi irrinunciabili della refertazione istologica



T1 High Risk

C) FRAMMENTI DI ADENOCARCINOMA INIZIALE MODERATAMENTE DIFFERENZIATO (G2), CON AREE DI SCARSA DIFFERENZIAZIONE (G3) DEL GROSSO INTESTINO INSORTO IN ADENOMA TUBULO-VILLOSO (cd ADENOMA CANCERIZZATO) (pT1, sm3).

Grado istologico: Moderatamente differenziato (G2) con campi G3

Profondità di invasione: Tumore che invade la sottomucosa (**pT1**)

Livello di invasione della sottomucosa: sm3 (Sec. Kikuchi).

Profondità di invasione della sottomucosa: > 2 mm.

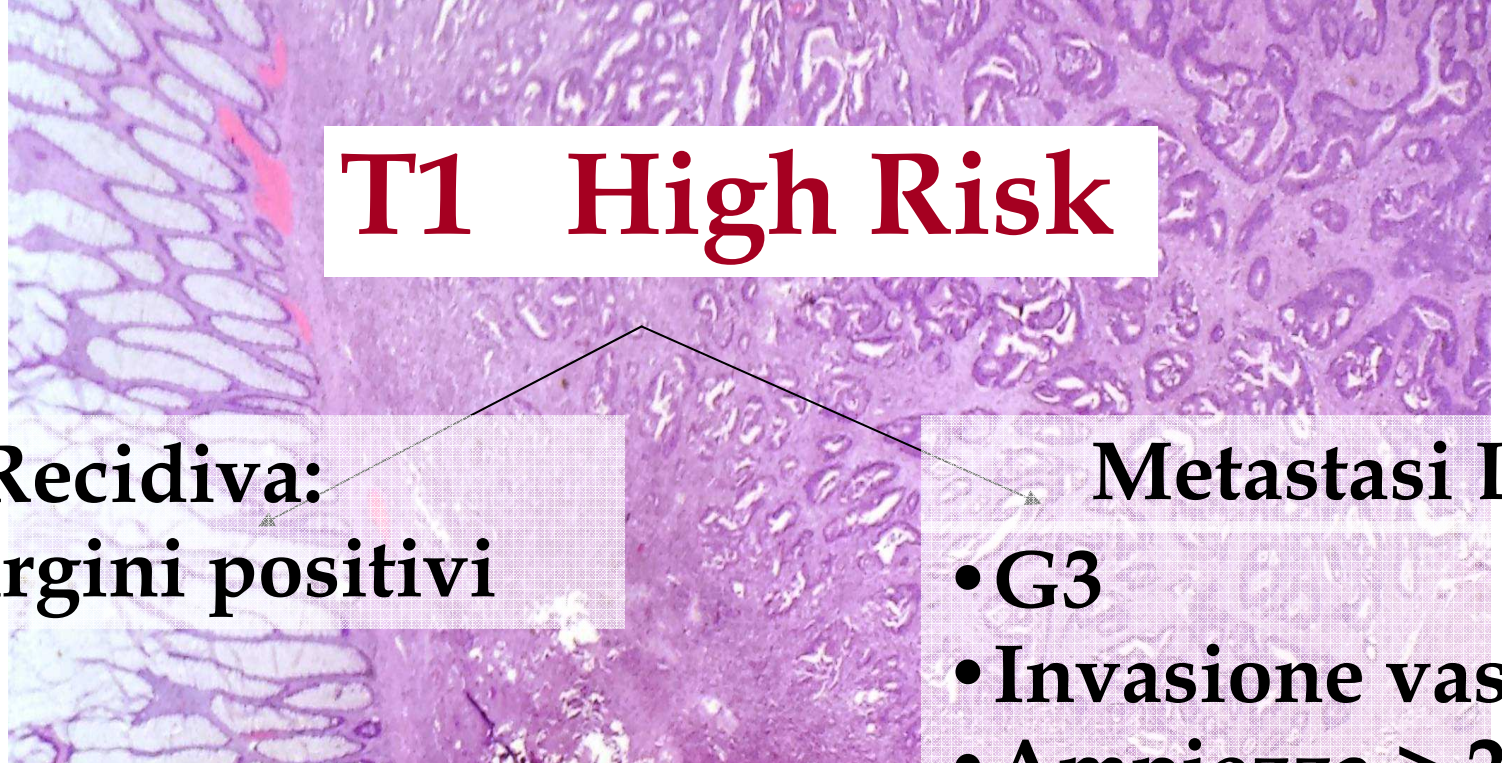
Ampiezza di invasione della sottomucosa: > 4 mm.

Invasione vascolare ematica o linfatica: Non evidente sulle sezioni esaminate

Budding tumorale: alto grado

Rapporto quantitativo tessuto adenomatoso/adenocarcinoma: 60/40

Margini di resezione: margine di resezione chirurgica diffusamente infiltrato da adenocarcinoma



T1 High Risk

Recidiva:
- **Margini positivi**

Metastasi LN:
- **G3**
- **Invasione vascolare**
- **Ampiezza > 2 mm**

C) FRAMMENTI DI ADENOCARCINOMA INIZIALE MODERATAMENTE DIFFERENZIATO (G2), CON AREE DI SCARSA DIFFERENZIAZIONE (G3) DEL GROSSO INTESTINO INSORTO IN ADENOMA TUBULO-VILLOSO (cd ADENOMA CANCERIZZATO) (pT1, sm3).

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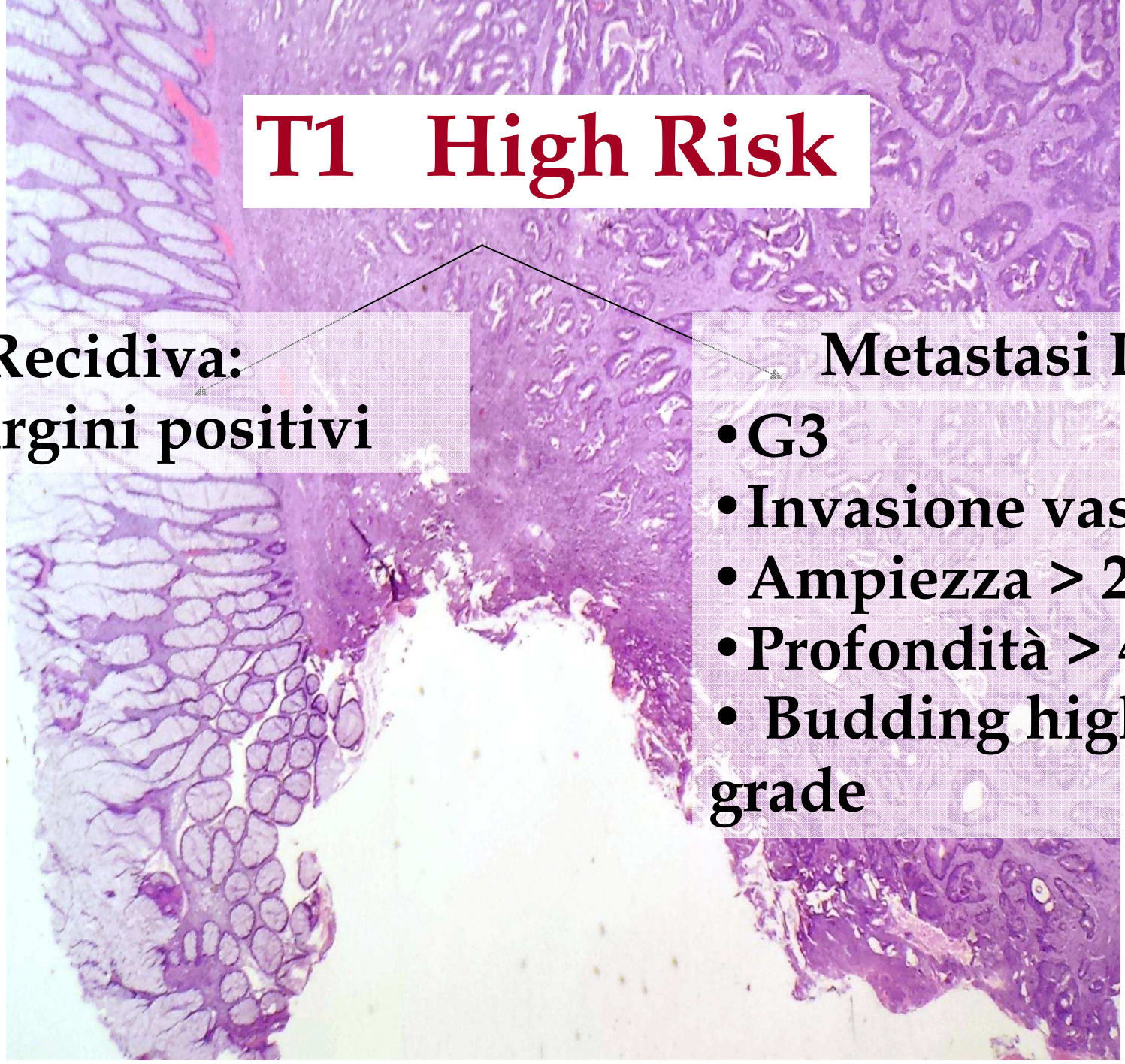
Budding tumorale: alto grado

T1 High Risk

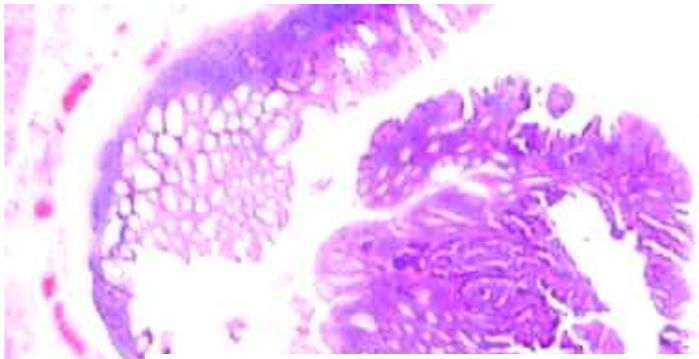


Recidiva:

- **Margini positivi**

Metastasi LN:

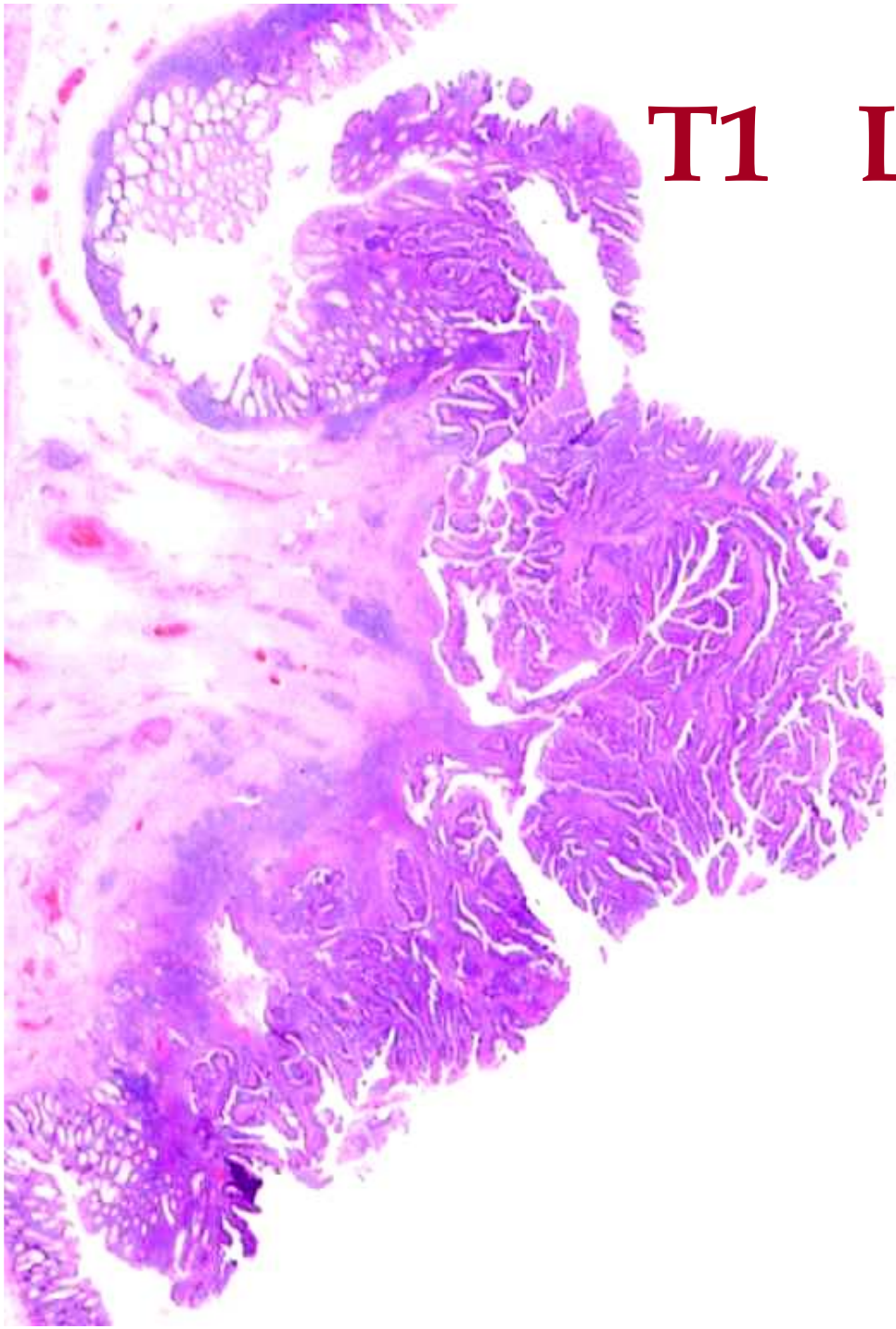
- **G3**
- **Invasione vascolare**
- **Ampiezza > 2 mm**
- **Profondità > 4 mm**
- **Budding high grade**



T1 Low Risk

ADENOCARCINOMA INIZIALE MODERATAMENTE DIFFERENZIATO (G2) DEL GROSSO INTESTINO INSORTO IN ADENOMA TUBULO-VILLOSO (cd ADENOMA CANCERIZZATO) (pT1,sm1).

Grado istologico
Moderatamente differenziato (G2)
Crescita: Infiltrante
Profondità di invasione: Tumore che invade la sottomucosa (**pT1**)
Livello di invasione della sottomucosa: sm1 (Sec. Kikuchi).
Profondità di invasione della sottomucosa: < 1 mm.
Ampiezza di invasione della sottomucosa: <2 mm.
Invasione vascolare ematica o linfatica: Non evidente sulle sezioni esaminate
Budding tumorale: basso grado
Rapporto quantitativo tessuto adenomatoso/adenocarcinoma : 95/5
Margini di resezione: margine di resezione chirurgica -ove valutabile- indenne



T1 Low Risk

- G1-G2
- No invasione vascolare
- Ampiezza < 2mm
- Profondità < 4 mm
- Budding low grade
- Margini indenni

Digestive Endoscopy 2015; **: **–** doi: 10.1111/den.12503

Review

Management of colorectal T1 carcinoma treated by endoscopic resection

Yusuke Saitoh,[1] Yuhei Inaba,[1] Takahiro Sasaki,[1] Ryuji Sugiyama,[1] Ryuji Sukegawa[1] and Mikihiro Fujiya[2]

[1]*Digestive Disease Center, Asahikawa City Hospital, and* [2]*Division of Gastroenterology and Hematology/Oncology, Department of Internal Medicine, Asahikawa Medical University, Asahikawa, Japan*

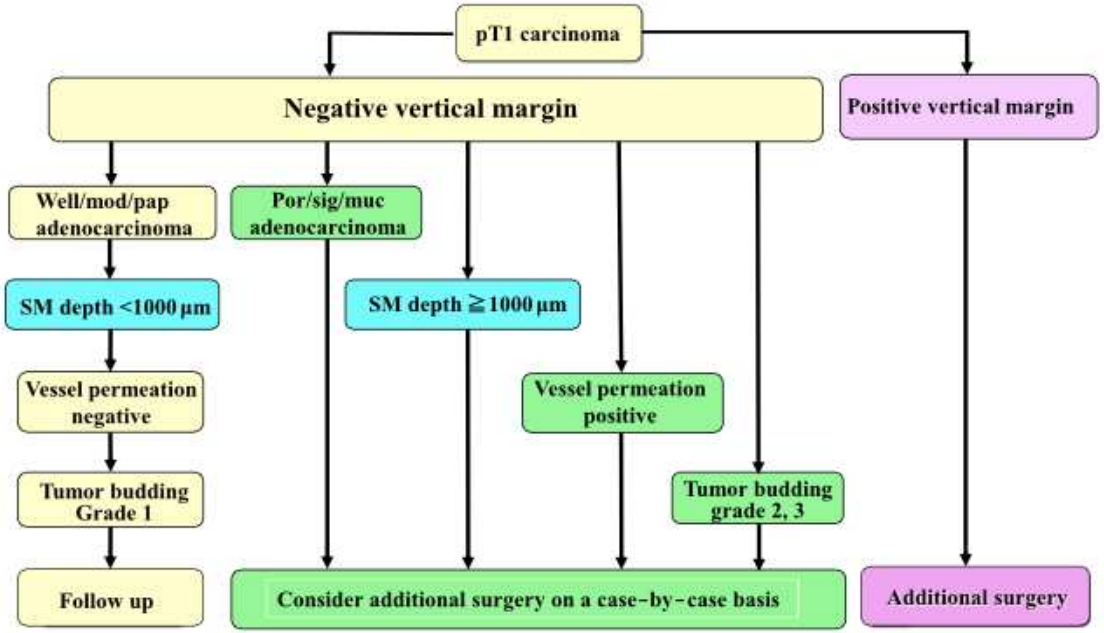


Figure 2 Therapeutic strategy for submucosal (T1) carcinomas after endoscopic resection based on Japanese Society for Cancer of the Colon and Rectum (JSCCR) Guidelines for the Treatment of Colorectal Cancer 2014.

Colorectal Disease

Systematic review

doi:10.1111/codi.12129

Systematic review and meta-analysis of histopathological factors influencing the risk of lymph node metastasis in early colorectal cancer

C. Beaton*, C. P. Twine*, G. L. Williams* and A. G. Radcliffe†

*Department of Colorectal Surgery, Royal Gwent Hospital, Newport, UK and †Screening Division, Public Health Wales, Cardiff, UK

Received 18 June 2012; accepted 4 September 2012; Accepted Article online 20 January 2013

Twenty-three cohort studies including 4510 patients were analysed.

T1 e rischio di metastasi linfonodale

There was a significantly higher risk of LN metastasis with a depth of submucosal invasion > 1 mm than with lesser degrees of penetration (OR 3.87, 95% CI 1.50-10.00, P = 0.005).

Lymphovascular invasion was significantly associated with LN metastasis (OR 4.81, 95% CI 3.14-7.37, P < 0.00001).

Poorly differentiated tumours had a higher risk of LN metastasis compared with well or moderately differentiated tumours (OR 5.60, 95% CI 2.90-10.82, P < 0.00001).

Tumour budding was found to be significantly associated with LN metastasis (OR 7.74, 95% CI 4.47-13.39, P < 0.001).

Beaton C et al, 2013

Tech Coloproctol (2015) 19:577–585
DOI 10.1007/s10151-015-1361-y

CLINICAL GUIDELINES

Practice parameters for early colon cancer management: Italian Society of Colorectal Surgery (Società Italiana di Chirurgia Colo-Rettale; SICCR) guidelines

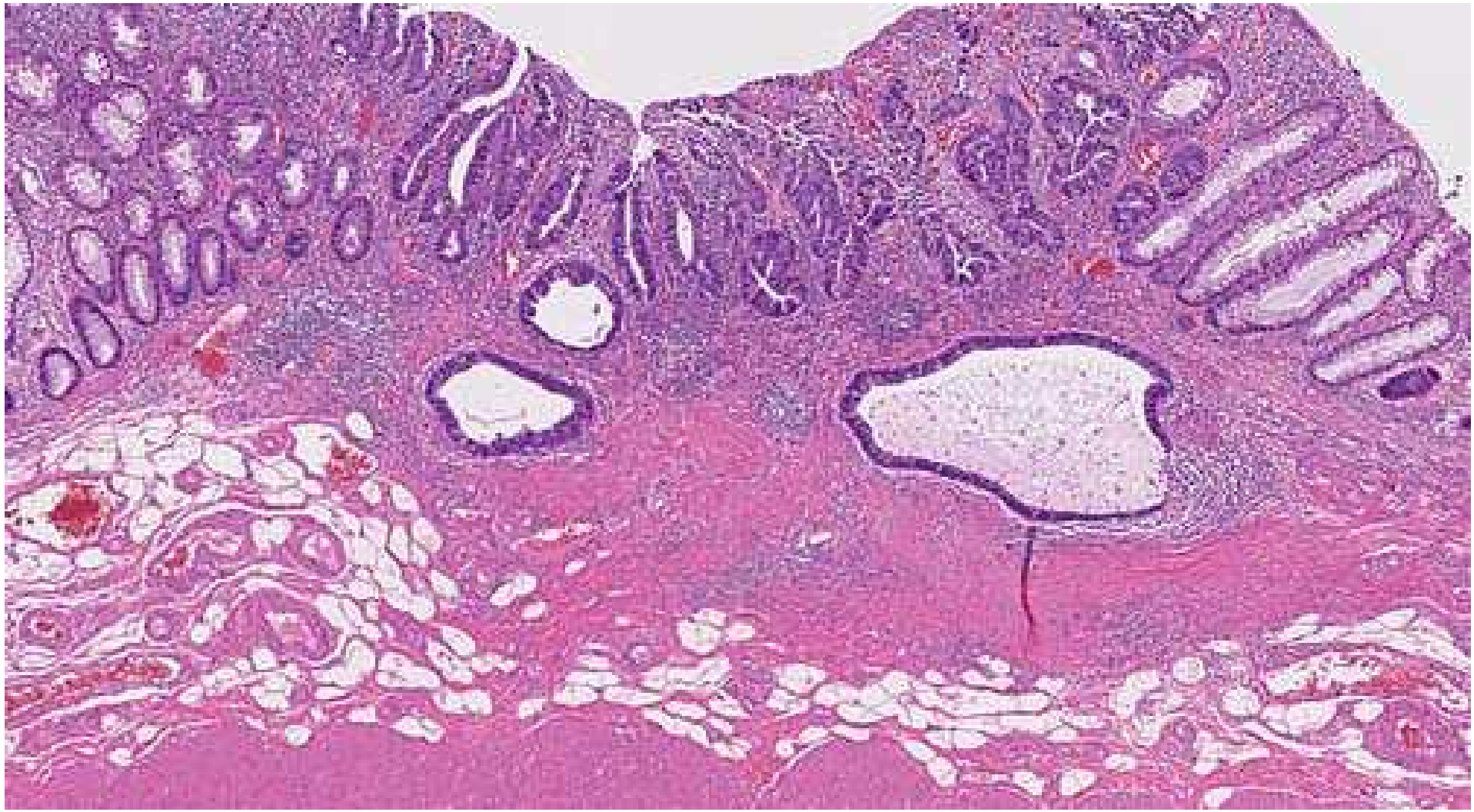
F. Bianco[1] · A. Arezzo[2] · F. Agresta[3] · C. Coco[4] · R. Faletti[5] · Z. Krivocapic[6] · G. Rotondano[7] · G. A. Santoro[8] · N. Vettoretto[9] · S. De Franciscis[1] · A. Belli[1] · G. M. Romano[1]

T1 e rischio di metastasi linfonodale

- The potential risk of lymph node metastasis ranges from 6 to 19 %

- Profondità di invasione: risk of lymph node metastasis ranges from 1 % in sm1 to up to 15 % in sm3 lesions
- submucosal depth of invasion between 1 and 2 mm risk: 1.3 to 4 %; 12–18 % of patients with submucosal invasion depth >2 mm
- submucosal invasion depth <1 mm: risk of LN metastasesis not zero (1.9 %), if >1 mm 14.6 %

Da dove si misura?

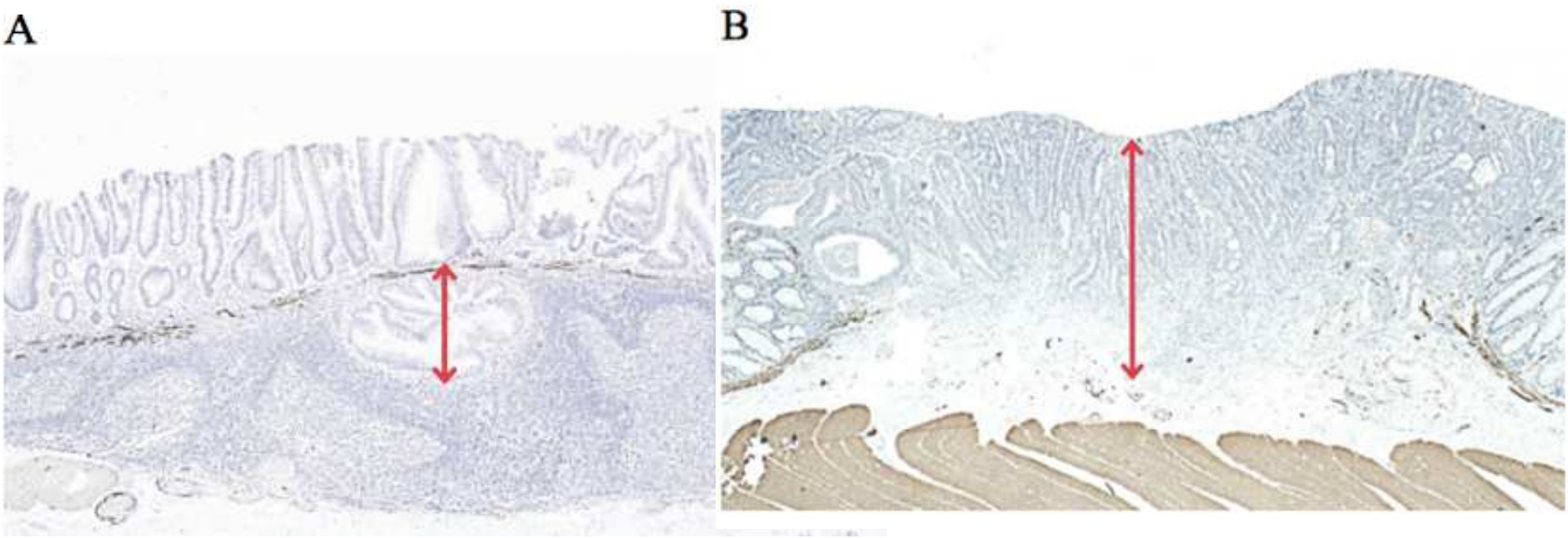


Int J Colorectal Dis
DOI 10.1007/s00384-015-2403-7

ORIGINAL ARTICLE

Practical problems of measuring depth of submucosal invasion in T1 colorectal carcinomas

Yuta Kouyama[1] · Shin-ei Kudo[1] · Hideyuki Miyachi[1] · Katsuro Ichimasa[1] · Tomokazu Hisayuki[1] · Hiromasa Oikawa[1] · Shingo Matsudaira[1] · Yui J. Kimura[1] · Masashi Misawa[1] · Yuichi Mori[1] · Kenta Kodama[1] · Toyoki Kudo[1] · Takemasa Hayashi[1] · Kunihiko Wakamura[1] · Atsushi Katagiri[1] · Eiji Hidaka[1] · Fumio Ishida[1] · Shigeharu Hamatani[1,2]



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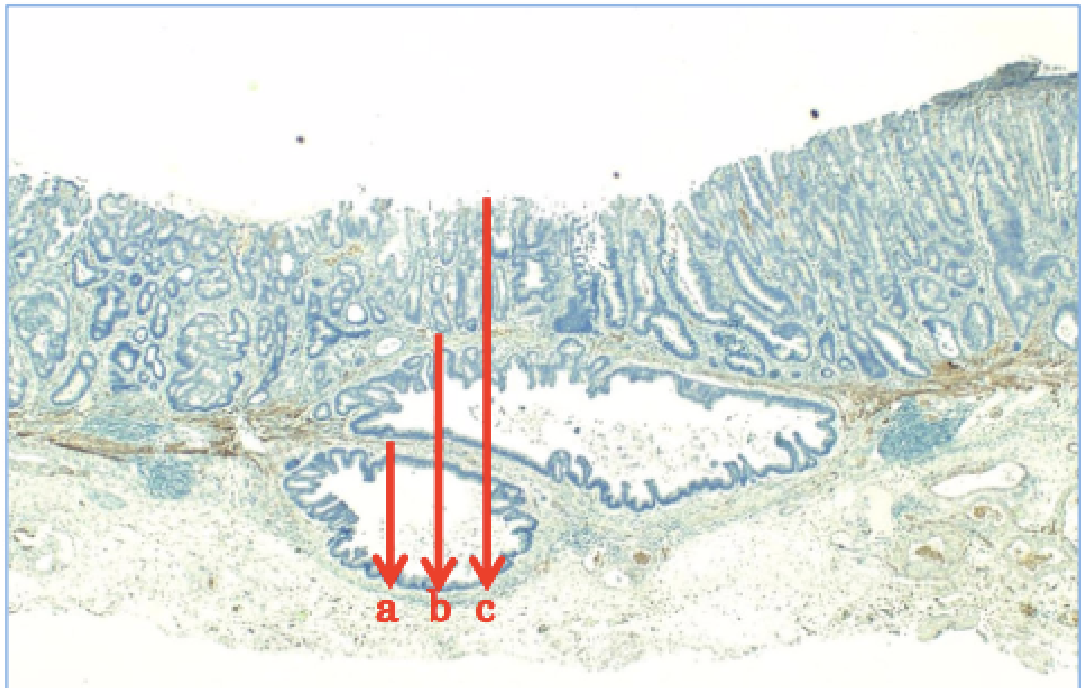
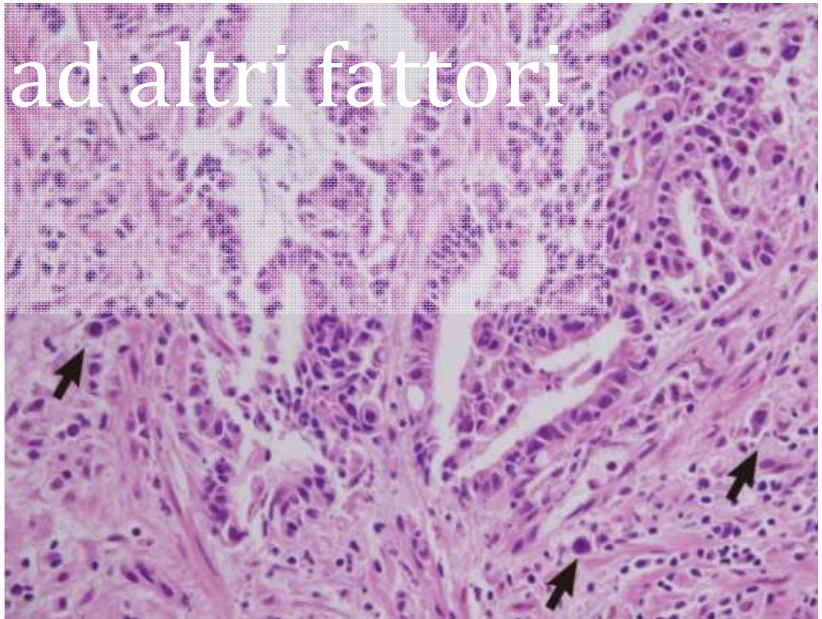


Fig. 5 A case in which determining the submucosal invasion depth measurement baseline was difficult. a A 23-mm non-granular LST located in the ascending colon. b The pathological finding of desmin antibody staining. The submucosal invasion depth was 630 μm when measured from the lower line (Fig. 5b, a), 1325 μm when measured from the upper line (Fig. 5b, b), and 2150 μm when measured from the surface of the lesion (Fig. 5b, c)

T1 e rischio di metastasi linfonodale

- Invasione vascolare: Fattore di rischio indipendente confermato in piu studi con >200 pT1 valutati

- Budding tumorale: dimostrata associazione con HR ma spesso coesistente ad altri fattori avversi (i.e. G3)



T1 e rischio di metastasi linfonodale

- Poor differentiation: found in a small proportion of colorectal malignant polyp, with a rate ranging between 4 and 7.2 %

Poorly differentiated clusters :PDCs

T1 e rischio di metastasi linfonodale

J Gastroenterol (2014) 49:1314–1323
DOI 10.1007/s00535-013-0881-3

The Japanese Society of Gastroenterology

ORIGINAL ARTICLE—ALIMENTARY TRACT

Novel risk factors for lymph node metastasis in early invasive colorectal cancer: a multi-institution pathology review

Hideki Ueno · Kazuo Hase ·
Shin-ei Kudo · Masafumi Ta
Keiji Matsuda · Koji Komor
Eiji Shinto · Takahiro Nakaı

Poorly differentiated clusters :PDCs

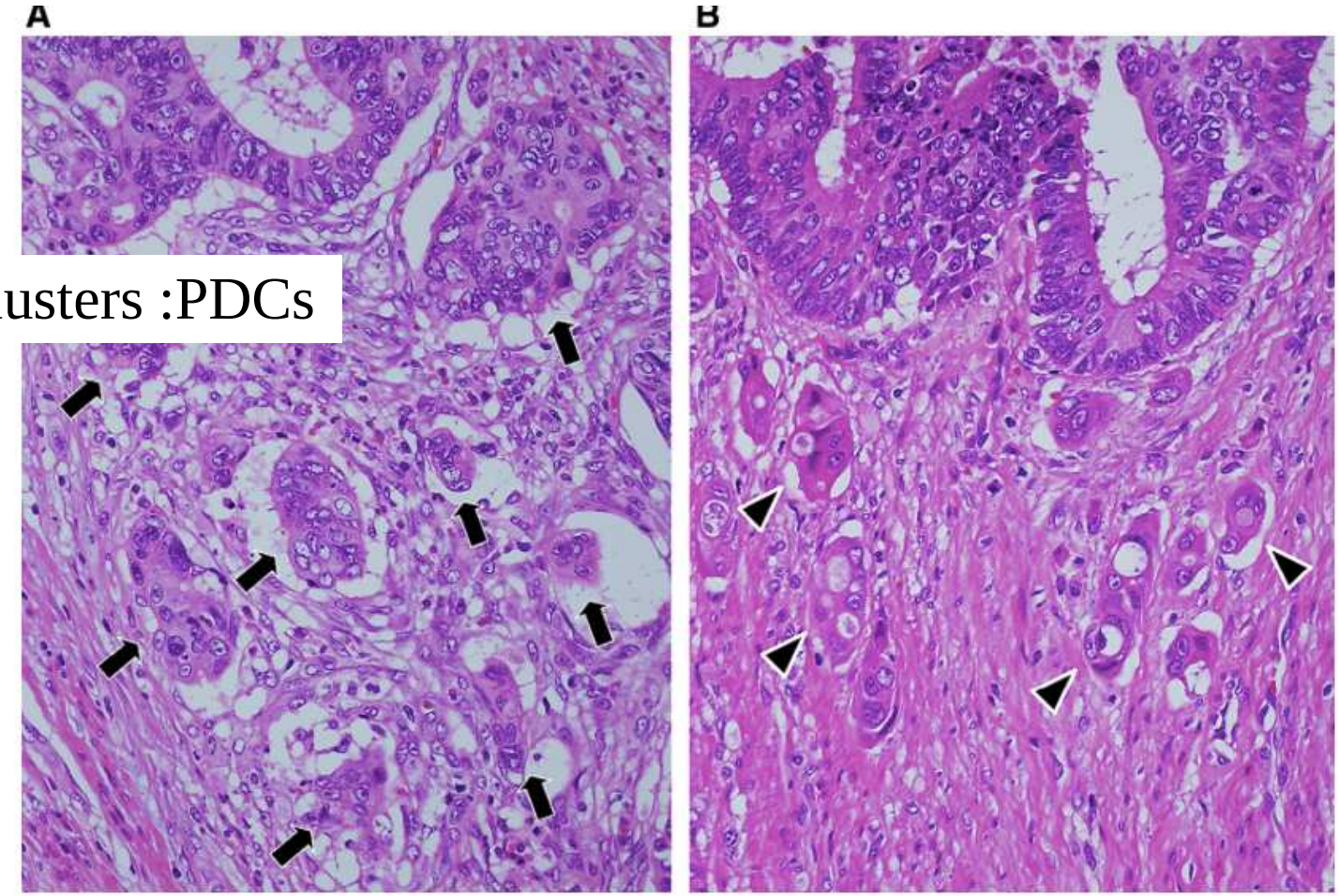


Table 2 Correlation between poorly differentiated clusters and other histopathological characteristics in early invasive colorectal cancer

	Poorly differentiated cluster		*P* value
	Negative	Positive (%)	
Depth of submucosal invasion			
<1000 μm	434	94 (17.8)	<0.0001
≥1000 μm	1721	1307 (43.2)	
Tumor grade			
Grade 1	1784	862 (32.6)	<0.0001
Grade 2	348	496 (58.8)	
Grade 3	23	43 (65.2)	
Vascular invasion			
Negative	1489	688 (31.6)	<0.0001
Positive	666	713 (51.7)	
Tumor budding			
Low grade	2022	955 (32.1)	<0.0001
High grade	133	446 (77.0)	

Comparison of risk factors in terms of their ability to identify the risk of LNM.

J Gastroenterol (2015) 50:727–734
DOI 10.1007/s00535-015-1057-0

The Japanese Society of Gastroenterology

CrossMark

REVIEW

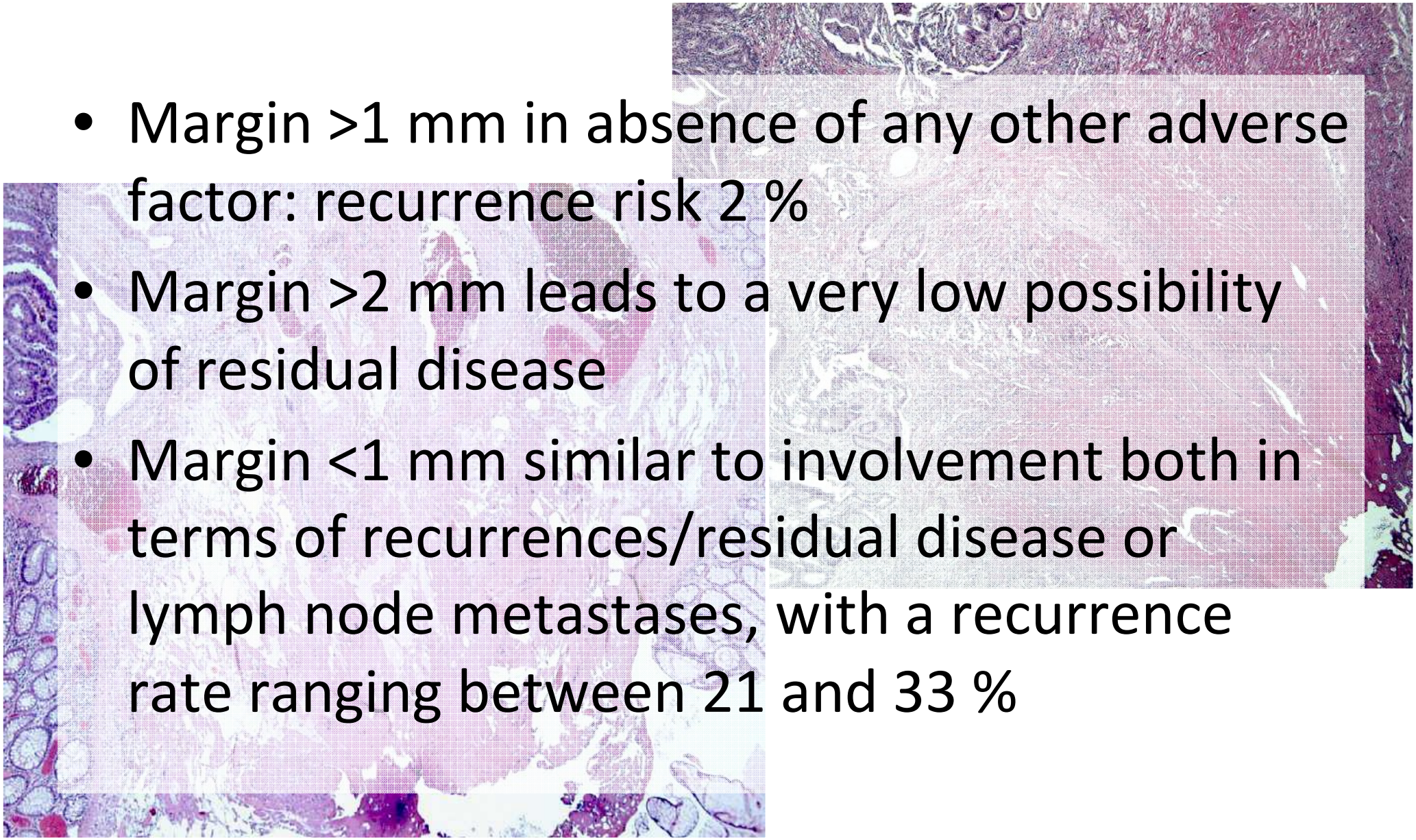
Systematic review and meta-analysis of histopathological predictive factors for lymph node metastasis in T1 colorectal cancer

Hiroo Wada · Manabu Shiozawa · Kayoko Katayama · Naoyuki Okamoto · Yohei Miyagi · Yasushi Rino · Munetaka Masuda · Makoto Akaike

Solo budding e invasione vascolare fattori di rischio indipendenti

- <800 pazienti
- Solo studi giapponesi
- Utilizzo di anticorpi e immunoistochimica

T1 e rischio di malattia residua



- Margin >1 mm in absence of any other adverse factor: recurrence risk 2 %
- Margin >2 mm leads to a very low possibility of residual disease
- Margin <1 mm similar to involvement both in terms of recurrences/residual disease or lymph node metastases, with a recurrence rate ranging between 21 and 33 %

LN metastasi: quanti LN tolti?

- In recent population studies conducted in the USA and Europe, it has been reported that the ‘‘magic’’ number of 12 lymph nodes examined is rarely achieved in district or community hospitals which fail to hit the target in 33–60 % of the cases.

Lo screening nel 2014 in Piemonte

Piemonte				
TOTALE				
16432	77	0,47%		
I Esame	CCR			
38345	64	0,17%		
Esami successivi	CCR			
STADIATI				
			pT1	% pT1
13291	62	38	16	0,12%
I Esame	CCR	61,3%	42,1%	
			pT1	% pT1
23743	45	37	11	0,05%
Esami successivi	CCR	82,2%	29,7%	

Lo screening nel 2014 in Piemonte

- *Sigmoidoscopia*:

28 CCR su 10471 esami

↓

18 stadiati di cui 7 pT1

↙

- 38,9% dei CCR
- 0.07% sul totale degli esami

Diagnosi pT1: State of the art

AQ completezza referto:

- 2000-2003 → 65%
- 2008-2012 → 88,9%

E ora?

pT1 colon- istologico in *screening regionale*

Referti completi = 23/28 82%

Referti incompleti = 5/28 18%

Referti incompleti = 5/28

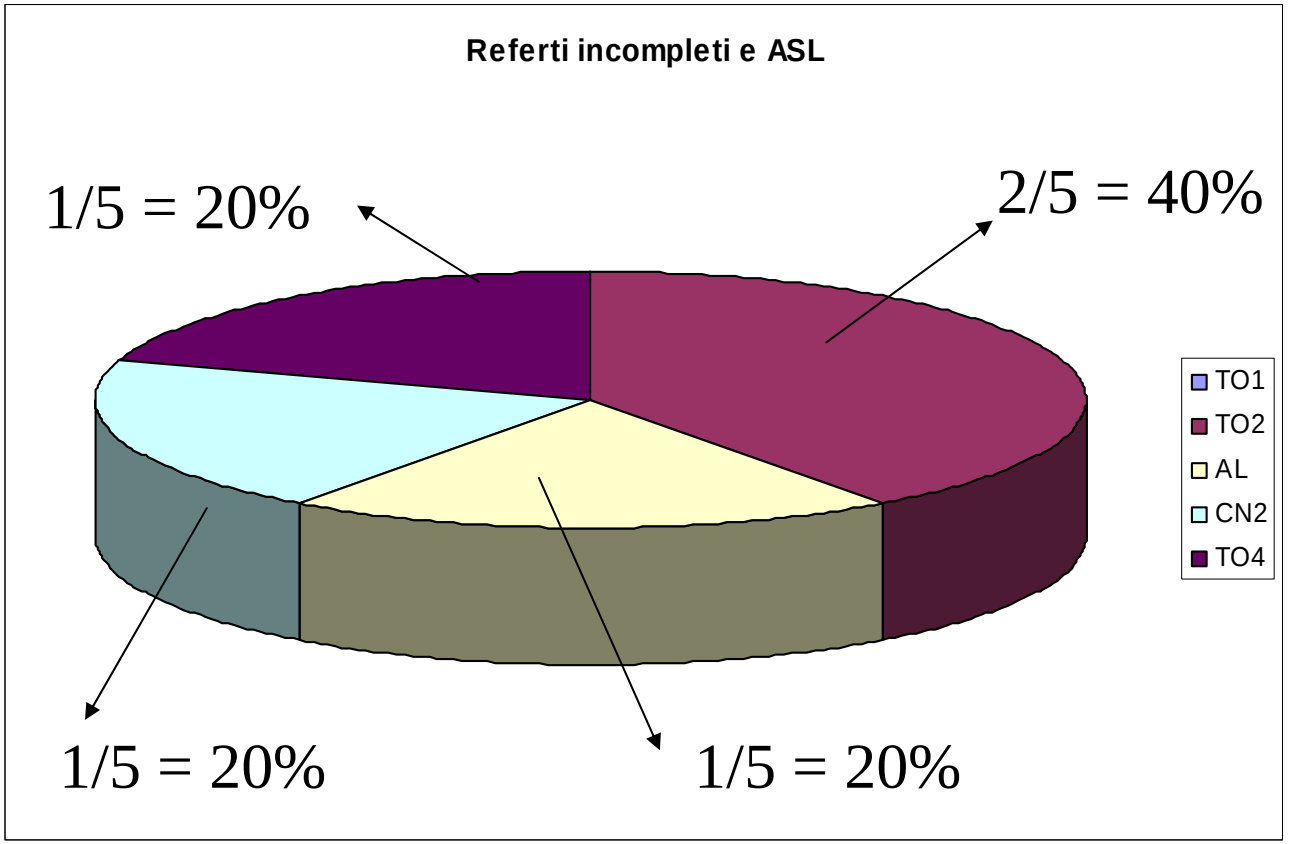
18%

Dati mancanti:

- Invasione vascolare: 3/5 = 60%
- Profondità e ampiezza: 4/5 = 80%
- Budding: 3/5 = 60%
- Margini (valutabili): 1/5 = 20%

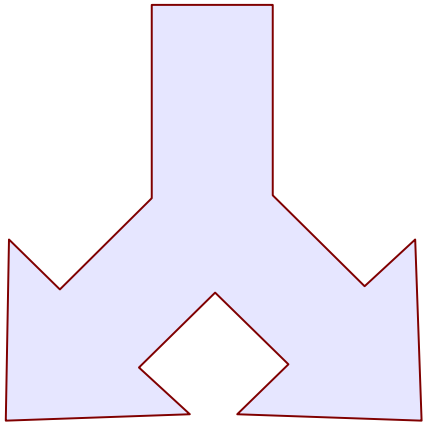
Appropriatezza e ASL

Referti incompleti: 5/28 = 18%



Appropriatezza del trattamento

RADICALIZZAZIONI: 14/28 = 50%

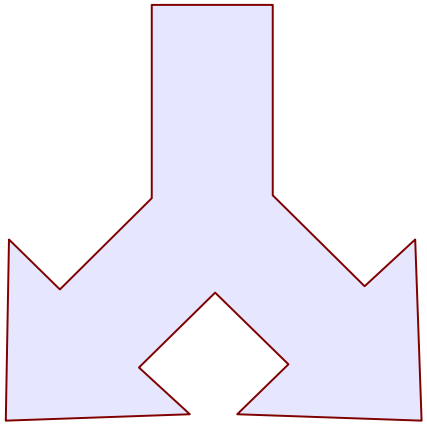


Conformi: 13/14 = 93% **Non conformi: 1/14 = 7%**

Referto incompleto/ non idoneo alla valutazione chirurgica

Appropriatezza del trattamento

NON RADICALIZZATI: 14/28 = 50%



Conformi: 3/14 = 21%

Non Conformi : 11/14 = 79%

8/11 = 73 % UNDERTREATMENT (?)

3/11 = 27 % Referto incompleto/ non idoneo alla valutazione chirurgica

Distribuzione dei parametri in pT1 HR

- 21HR/23 referti completi (91%)

G3: 13 (62%)
>2mm prof : 9 (43%)(4 in G3)
inv vasc: 2 (9%)(tutti G3, prof >2mm, budding hg)
budding hg: 6 (28%) (tutti G3) margini interessati: 7 (33%)

Referto istologico radicalizzazioni

- N+: 3/14 (21%)

2 N1, 1 N2b

Fattori di rischio:
N1: #1,2 profondità e ampiezza
N2b: G3
(tutti casi con margini indenni su polipectomia)

- Tumore presente:

12/14 (86%),
1/14 negativo,
1/14 displasia (margini + su polipectomia)

Original article

doi:10.1111/j.1463-1318.2012.03130.x

Management and short-term outcome of malignant colorectal polyps in the north of England[1]

M. D. Gill*†, M. D. Rutter†‡§ and S. J. Holtham*†¶

*NORCCAG (NORthern Colorectal Cancer Audit Group), Wansbeck General Hospital, Northumberland, UK, †NREG (Northern Region Endoscopy Group), UK, ‡University of Durham, Stockton-on-Tees, UK, §Department of Gastroenterology, University Hospital North Tees, Stockton-on-Tees, UK and ¶Department of Surgery, Sunderland Royal Hospital, Sunderland, UK

Received 7 February 2012; accepted 25 April 2012; Accepted Article online 18 June 2012

After initial endoscopic diagnosis, the decision to manage each patient by surgical resection or by endoscopic follow-up alone was made by the MDT. Of the 386 cases, 165 (42.7%) had biopsies taken, with no attempt made to remove the polyp. Of these, all underwent surgery, with 161 (97.6%) resection specimens showing the presence of residual tumour at the site of the biopsy.

Considerazioni sui dati T1 2014

- La percentuale di N+ nei nostri HR è ai limiti superiori di quanto riportato in letteratura
- Anche in casi in cui i margini erano indenni la radicalizzazione era T+
- Apparente shift verso minore radicalità nel trattamento rispetto al trend passato: MDT?

Synchronous lymph node metastasis in apparently low-risk T1 colon cancer

Endoscopy 2014
Masao et al.