

Il management dei polipi cancerizzati

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Trento

Polipi cancerizzati

- Diagnosi

- Trattamento

 - *solo endoscopico

 - *endoscopico + chirurgico

 - *solo chirurgico

- Follow-up

Rischio di malignità in un adenoma

■ *Polyp size* -

1.3% of adenomas less than 1 cm in size
9.5% between 1 and 2 cm
45% over 2 cm were malignant

■ *Pathology* -

4.8% of tubular
22.5% of tubulovillous
40.7% of villous adenomas were malignant

■ *Dysplasia* -

5.7% mild
18% of moderate
34.5% of adenomas with severe were malignant

Adenoma con carcinoma invasivo

Definizione

Polipo con aree adenocarcinomatose estese oltre la muscularis mucosae

- ***Polipo cancerizzato a “basso rischio”***

- Grading G 1-2
- Margine libero > 1 mm
- Non invasione vascolare

- ***Polipo cancerizzato ad “alto rischio”***

- Grading G3
- Infiltrazione dal margine < 1 mm
- Invasione vascolare
- Polipo maligno “sessile”
- Polipectomia piecemeal

Pro-polypectomy

- Avoidance of potential morbidity and mortality of bowel resection

Pro-surgery

- Improved recovery after laparoscopic resection
- Presence of lymphnode metastases even in localized disease
 - Elimination of early recurrence due to incomplete endoscopic removal

Polipo cancerizzato

Basso rischio

- margini liberi
- non invasione vascolare o linfatica
- ben differenziato

Alto rischio

- margini resezioni interessati
- invasione vascolare o linfatica
- basso grado di differenziazione

Polipectomia incompleta
Dubbio interessamento margini

**Non raccomandati ulteriori
trattamenti (ACG/AGA/ASGE)**

Chirurgia

Perché rimuovere i polipi colo-rettali

- Il primo obiettivo della polipectomia è quello **diagnostico**
- I prelievi biotici hanno scarso significato clinico: utili solo se aree di sospetta infiltrazione in polipi non rimuovibili “en bloc”
- I prelievi biotici sul polipo sono da evitare soprattutto in caso di lesione piatta; → fibrosi
- maggiori difficoltà nella eventuale successiva rimozione
- maggiori rischi di complicanze

Accuratezza nel predire un cancro invasivo non trattabile endoscopicamente (> sm1)

- L'aspetto endoscopico predice il cancro invasivo sm 1 e sm 2 (forma depressa, irregolarità della depressione, due pliche convergenti, pit-pattern 5n) fino al 90% dei casi.
- L'accuratezza dell'ecoendoscopia è dell'80%
- Il «non-lifting sign» ha meno sensibilità (61% vs. 84%) ed accuratezza (94% vs. 98%)

Parametri da valutare per una scelta terapeutica

- Grado di difficoltà tecnica della rimozione
- Probabilità di trattamento risolutivo
- Invasività e rischi dell' alternativa chirurgica (es. retto distale)
- Co-morbidità del paziente e rischio anestesiologicalo
- Attesa di vita del paziente

Valutare anche le variabili locali

- Contesto generale nel quale si opera (*anestesista in sala; anestesista al bisogno ecc.*)
- Esperienza dell' endoscopista
- Esperienza complessiva dell' equipe endoscopica
- Esperienza del chirurgo
- Esperienza dell' istologo
- Disponibilità di risorse locali: economiche, umane, temporali ecc.
- Le preferenze del paziente, che deve essere parte attiva nella scelta, inclusa la disponibilità a spostarsi verso un centro di riferimento

Linee guida europee e livello di competenza

Level 2: Removing polypoid and sessile lesions <25 mm providing there is good access. All colonoscopists should have this level of competency. **A**

Level 3: Removing smaller flat lesions (<20 mm) that are suitable for endoscopic therapy, larger sessile and polypoid lesions, and smaller lesions with more difficult access. Some flat lesions <20 mm with poor access might be unsuitable for this level. Any person doing colonoscopy for positive FOBT in a screening programme should have this level of competency. **B**

Level 4: Removing large flat lesions or other challenging polypoid lesions that might also be treated with surgery. This is the type of lesion that would not be removed at the first colonoscopy because of time constraints, if applicable, or because the surgical option needs to be discussed with the patient. If the patient chooses to have endoscopic therapy, then he/she should be referred to a level 4 competent endoscopist. This level of competency would be expected of only a small number of regionally based colonoscopists. **C D**

Livello 0 ed 1: per effettuare la sigmoidoscopia

Livello 2: minimo per effettuare la colonscopia

Livello 3: minimo per effettuare la colonscopia di screening

Livello 4: per affrontare le resezioni più complesse

Quando considerare la chirurgia

- Come alternativa alla rimozione endoscopica
- Quando la asportazione endoscopica si presenta problematica (polipo difficile)
- Alto rischio di neoplasia invasiva (aspetto endoscopico) e difficoltà nella resezione “en bloc”
- Cancro indifferenziato alla biopsia o G1/G2 e difficoltà nella resezione “en bloc”
- Dopo la rimozione endoscopica
- Polipo cancerizzato all' esame istologico del polipo con fattori prognostici sfavorevoli

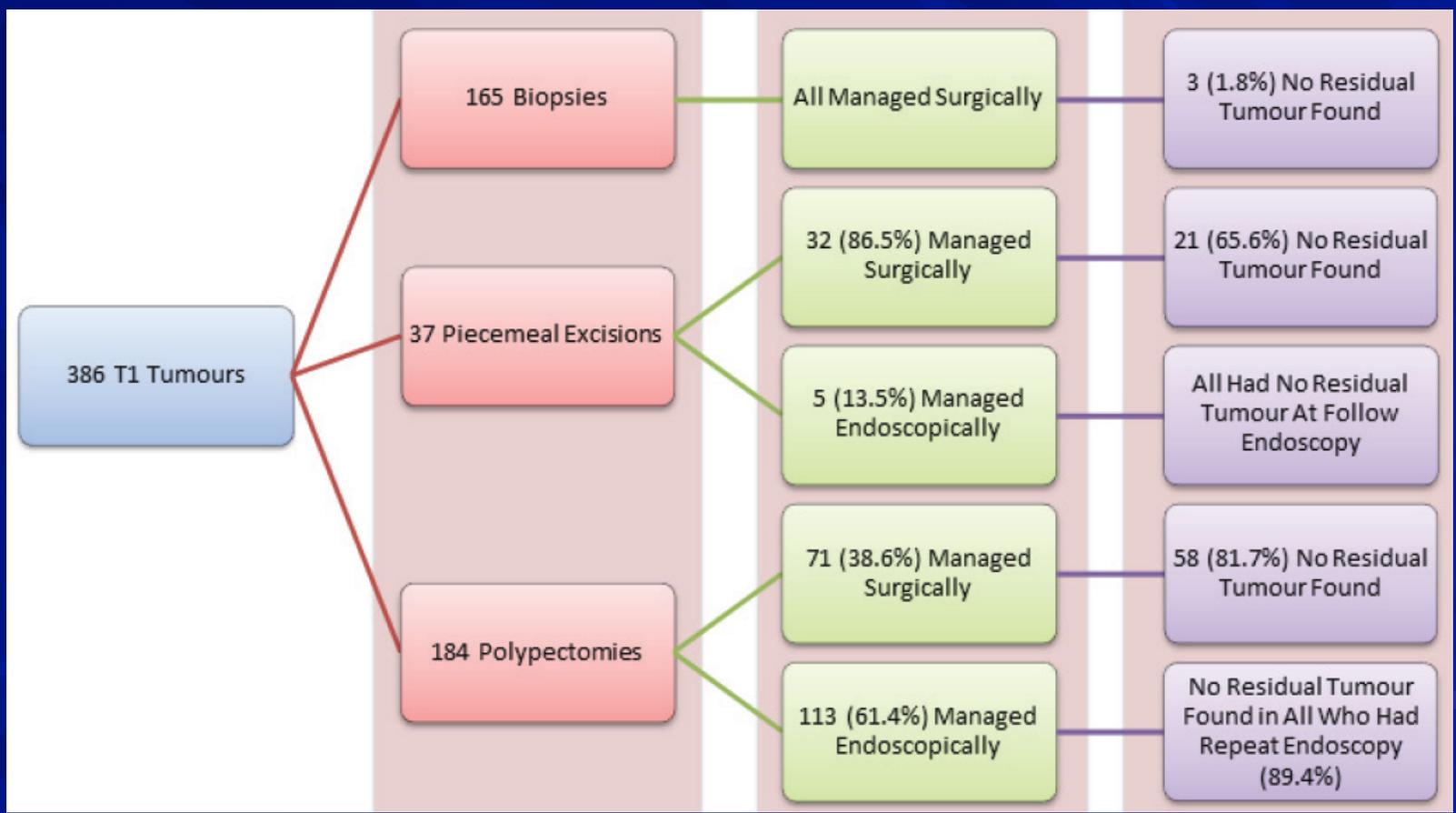


Colorectal Dis. 2012 Jun 18. doi: 10.1111/j.1463-1318.2012.03130.x. [Epub ahead of print]

Management and short term outcome of malignant colorectal polyps in the North of England.

Gill M, Rutter M, Holtham S.

NORCCAG (NORthern Colorectal Cancer Audit Group) NREG (Northern Region Endoscopy Group) Department of Surgery, Sunderland Royal Hospital University of Durham
Department of Gastroenterology, University Hospital North Tees.



**Predictors of finding residual tumour and lymph-node involvement at surgery:
Kikuchi Sm3 and Haggit 4+ involved/unsure excision margins**

Endoscopic sub-mucosal dissection

- This technique allows endoscopists to remove a polyp en-bloc, **irrespective of its size**, provided there is no/little risk of lymph-node metastases and invasion is limited to superficial layers of submucosa

TEM vs ESD: non esistono studi adeguati comparativi (T1 sm)

Vantaggi TEM

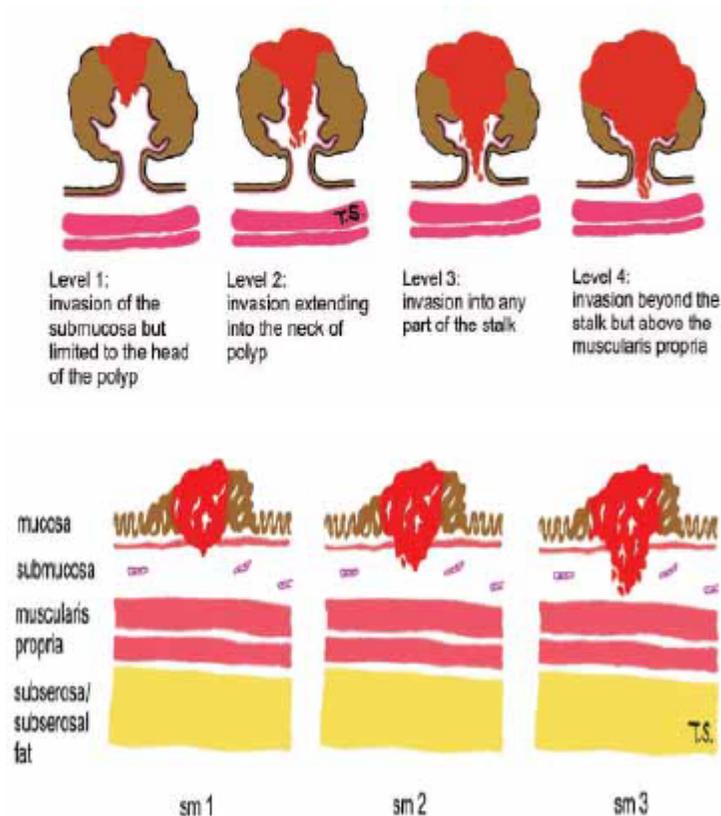
- Indicata nei cancri T1 (ESD nei T1, sm1) e proposta in casi selezionati di T2 (con chemio-radio)
- Migliori follow-up
- Tecnica più standardizzata

Svantaggi TEM

- > rischio di asportazione incompleta: 10% *
- > rischio di recidiva: 4,5%*

* revisione sistematica su 1857 TEM: Maslekar 2006 Dig Surg

LG europee - sub-staging



- *Livelli di Kikuchi* (sessili)
- *Livelli di Haggitt* (peduncolati)
- Misurazione della *profondità* (> 2.000 μm) ed *ampiezza* (> 4.000 μm) di invasione (Ueno 2004)
- Ciascuno dei tre sistemi presenta vantaggi e svantaggi
- Necessità di ulteriori studi per elaborare più precise raccomandazioni basate sull'evidenza

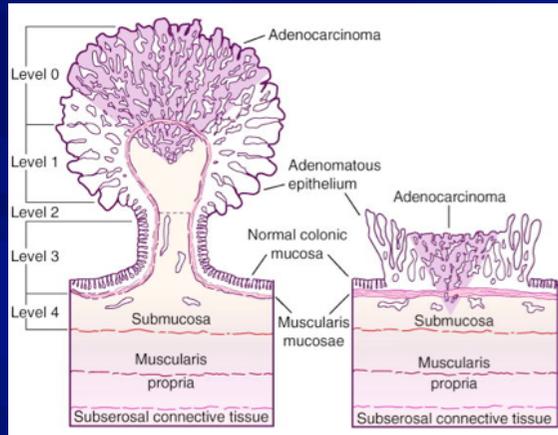
Adenoma cancerizzato (T1)

Definizione di lesione ad alto rischio

Ulteriori parametri

- *Adenoma/ carcinoma ratio*
- Tumour budding

Polipi cancerizzati e rischio linfonodale

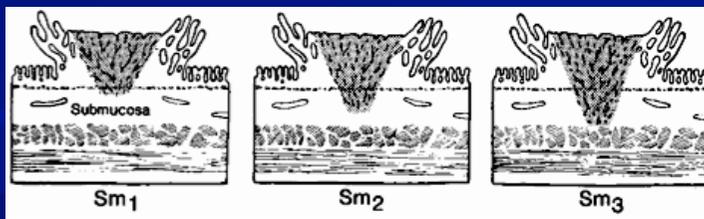


Classificazione di Haggitt

Livello 1-2-3 basso rischio (<1%)
Livello 4 alto rischio (30%)

Classificazione di Kudo

Sm1, Sm2 basso rischio (3-8%)
Sm3 alto rischio (23%)



Classificazione di Okabe

Sm1,sm2 <1000 μ m (2%)
Sm3 >1000 μ m (12%)

Endoscopically removed malignant polyps in colorectal cancer screening programs. Impact of histologic re-evaluation

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New histologic reporting form

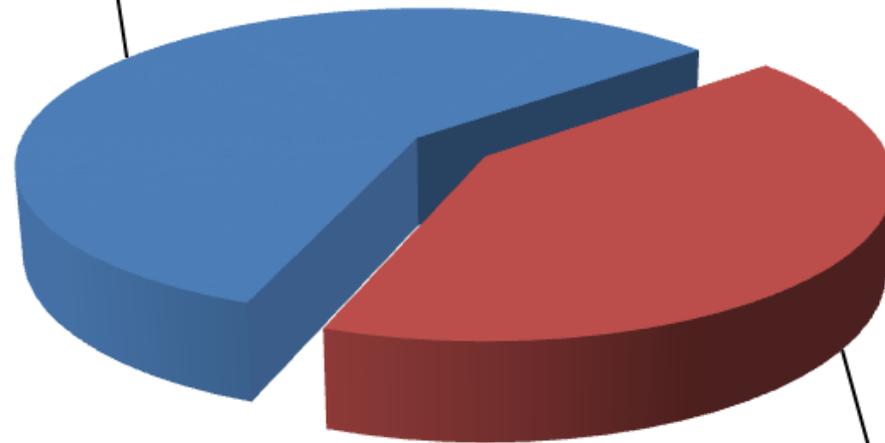
High risk ∴ Low risk ∴

Which factors have contributed to definition of High Risk

- *sessile morphology*
- *distance resection margin-neoplasia*
- *differentiation grade*
- *limfo-vascular invasion*
- *microstadiation parameters*
- *tumour budding, high grade*

Change of risk class

from LOW to
HIGH
7



from HIGH to
LOW
5

Most frequently involved parameters in change of risk class

- Decrease of risk class → Depth of invasion
- Increase in risk class → Budding

- 2 cases classified as overtreated
- 2 cases classified as undertreated

Original Article

Trends, Patterns, and Outcomes in the Management of Malignant Colonic Polyps in the General Population of the United States

Nabil Wasif, MD^{1,2}; David Etzioni, MD²; Melinda A Maggard, MD³; James S Tomlinson, MD^{3,4}; and Clifford Y Ko, MD, MSHS^{3,4}

Table 2. Predictors of Surgical Resection{TC}

N = 11,254^a	OR	P	95% CI
Age >70 y ^b	1.00		
Age <70 y	1.30	<.001	1.18-1.43
Time period 1988-1993 ^b	1.00		
1994-1998	1.19	.005	1.05-1.35
1999-2003	1.71	<.001	1.52-1.92
Low tumor grade ^b	1.00		
High tumor grade	1.54	<.001	1.24-1.91
Tubular type ^b	1.00		
Tubulovillous	1.13	.029	1.01-1.25
Villous	2.29	<.001	1.98-2.64
Located in left colon ^b	1.00		
Transverse colon	3.41	<.001	2.91-3.98
Right colon	8.08	<.001	6.97-9.37

OR indicates odds ratio; 95% CI, 95% confidence interval.

^a Number entering regression.

^b Referent category.

Original Article

Management of Malignant Colonic Polyps: A Population-Based Analysis of Colonoscopic Polypectomy Versus Surgery

Gregory S. Cooper, MD^{1,2}; Fang Xu, MS^{1,3}; Jill S. Barnholtz Sloan, PhD^{2,3}; Siran M. Koroukian, PhD^{2,3};
and Mark D. Schluchter, PhD^{2,3}

Cancer, 2012

Table 1. Literature Series of Treatment Indicators for Early Invasive Colorectal Cancers

Author (yr)	Number of tumors analyzed ^a	Number of adverse outcomes analyzed	Recommended indicators for additional laparotomy
Colacchio, ¹ 1981	24 (A 24)	6 (LN 6)	None
Lipper, ² 1983	51 (A 23, B 28)	2 (residual 1, LR 1)	Margin
Haggitt, ⁹ 1985	64 (A 13, B 26, C 25)	8 (LN 4, LR 2, others 2)	Level
Cranley, ⁴ 1986	38 (A 20, B 18)	10 (LN 3, residual 7, LR 2) ^p	Grade, margin, lymphatic invasion
Richards, ³⁰ 1987	80 (A 44, B 36)	10 (LN 6, residual 6) ^p	Grade, margin, stalk invasion, vascular invasion
Coverlizza, ⁵ 1989	31 (A 18, C 13)	6 (LN 5, residual 1)	Margin, grade, vascular invasion
Kyzer, ¹⁰ 1992	44 (A 29, B 15)	3 (LN 1, residual 3) ^p	Level
Minamoto, ³¹ 1993	40 (Not described)	6 (LN 6)	Grade, level, lymphatic invasion, growth pattern, adenomatous component
Kikuchi, ³² 1995	182 (A 23, B 74, C 85)	21 (LN 13, residual 4, LR 4)	Level, tumor configuration, location
Hase, ¹⁹ 1995	79 (A 25, C 54)	11 (LN 11)	Tumor budding, growth pattern, grade, level, lymphatic invasion
Cooper, ⁶ 1995	140 (A 104, B 36)	16 (LN 13, residual 1, LR 2)	Margin, grade, vascular invasion
Volk, ⁷ 1995	47 (A 21, B 26)	10 (residual 6, LR 2, others 2)	Grade, margin
Whitlow, ¹⁵ 1997	59 (A 37, B 22)	4 (residual 3, LR 1)	Level, margin, grade
Netzer, ⁸ 1998	70 (A 31, B 39)	16 (LN 2, residual 12, LR 2, others 1) ^p	Margin, vascular invasion, grade
This series	292 (A 80, B 41, C 171)	50 (LN 33, residual 4, LR 3) (extramural 2, intramural 1, micrometastasis 10)	Margin, vascular invasion, grade, tumor budding, depth/width of submucosal invasion

LN, lymph node metastases; residual, residual tumor observed at endoscopic excision site; LR, local recurrence after local excision; margin, resection margin; level, level of submucosal invasion; grade, tumor grade; vascular invasion, lymphatic/venous invasion

^aA, local resection followed by laparotomy; B, local resection only; C, primarily laparotomy.

^pThere were patients with both nodal involvement and residual tumor.

CLINICAL-ALIMENTARY TRACT

Risk Factors for an Adverse Outcome in Early Invasive Colorectal Carcinoma

HIDEKI UENO,* HIDETAKA MOCHIZUKI,* YOJIRO HASHIGUCHI,* HIDEYUKI SHIMAZAKI,†
SHINSUKE AIDA,† KAZUO HASE,§ SUSUMU MATSUKUMA,|| TADAO KANAI,¶ HIROYUKI KURIHARA,¶
KOTARO OZAWA,¶ KAZUYOSHI YOSHIMURA,# AND SHINYA BEKKU#

Departments of *Surgery I and †Laboratory Medicine, National Defense Medical College, Saitama, Japan; Departments of §Surgery and ¶Pathology, Self Defense Forces Central Hospital, Tokyo, Japan; ¶Tokorozawa Proctologic Hospital, Saitama, Japan; and #Department of Surgery, Self Defense Forces Misawa Hospital, Aomori, Japan

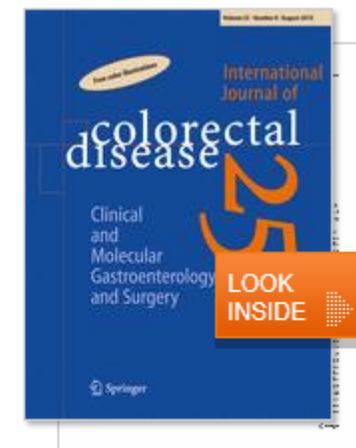
Conclusions: Provided that the criterion of sufficient excision is satisfied, the absence of an unfavorable tumor grade, vascular invasion, tumor budding, and extensive submucosal invasion would be the strict criteria for a wait-and-see policy.

International Journal of Colorectal Disease

April 2010, Volume 25, Issue 4, pp 433-438

The concurrence of histologically positive resection margins and sessile morphology is an important risk factor for lymph node metastasis after complete endoscopic removal of malignant colorectal polyps

Lars Boenicke, Martin Fein, Marco Sailer, Christoph Isbert, Christoph-Tomas Germer, Andreas Thalheimer



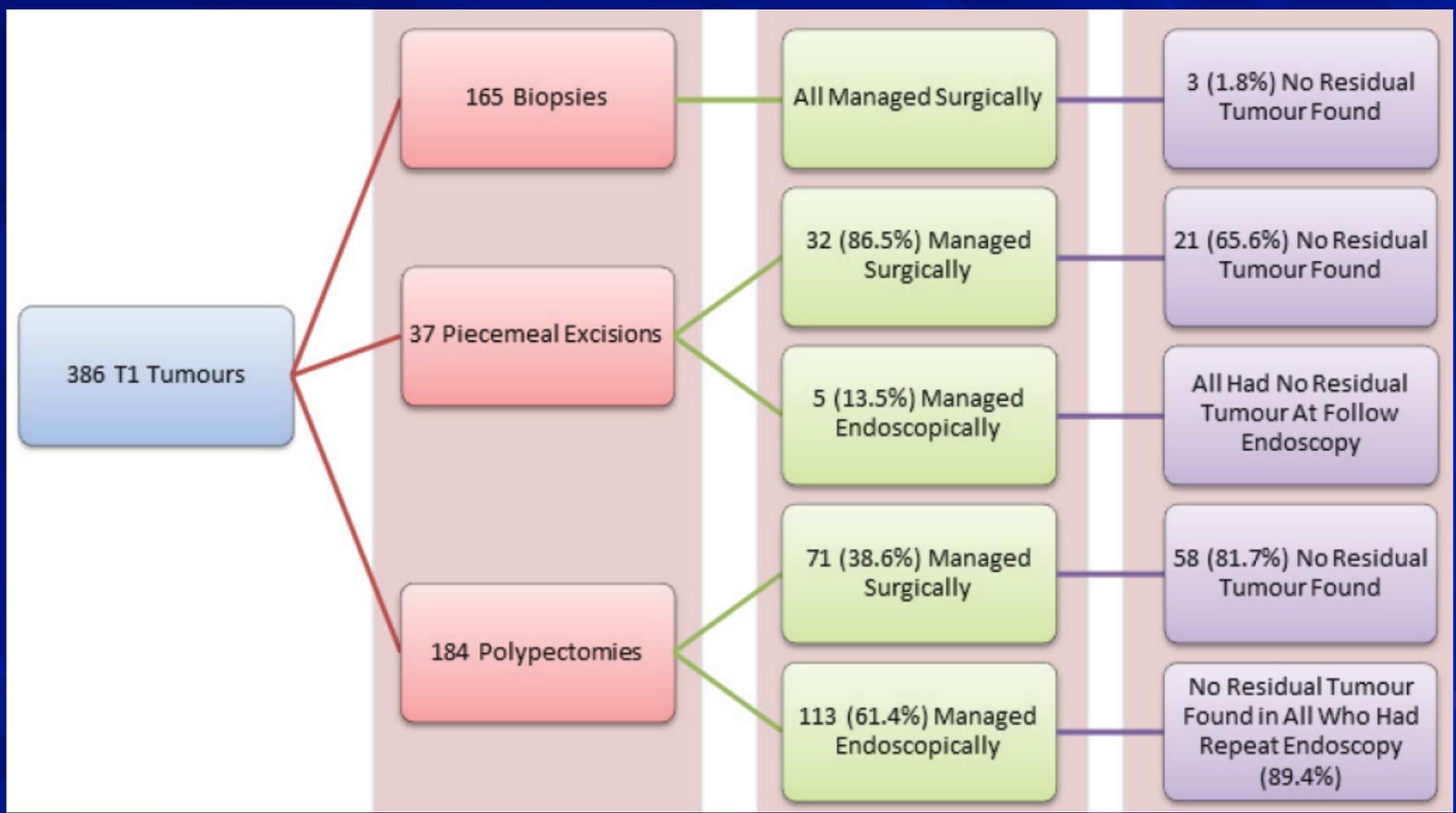


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**Predictors of finding residual tumour and lymph-node involvement at surgery:
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Histologic risk factors and clinical outcome (*Hassan et al.*)

- Resection margin (R of residual disease)
- Vascular invasion (R of lymphnode metastases)
- Poor differentiation (R of mortality)
- High risk worse outcome than low-risk, especially for mortality
- Surgical-related death rate:0.8%

Surgical outcome of screen-detected endoscopically-treated malignant polyps: data from a northern Italian register

Fasoli R¹, Guido E², Rosa Rizzotto E² Di Piramo D³, Meggio A⁴, Lo Mele M⁵, Cassoni P⁶ Brighenti A⁷

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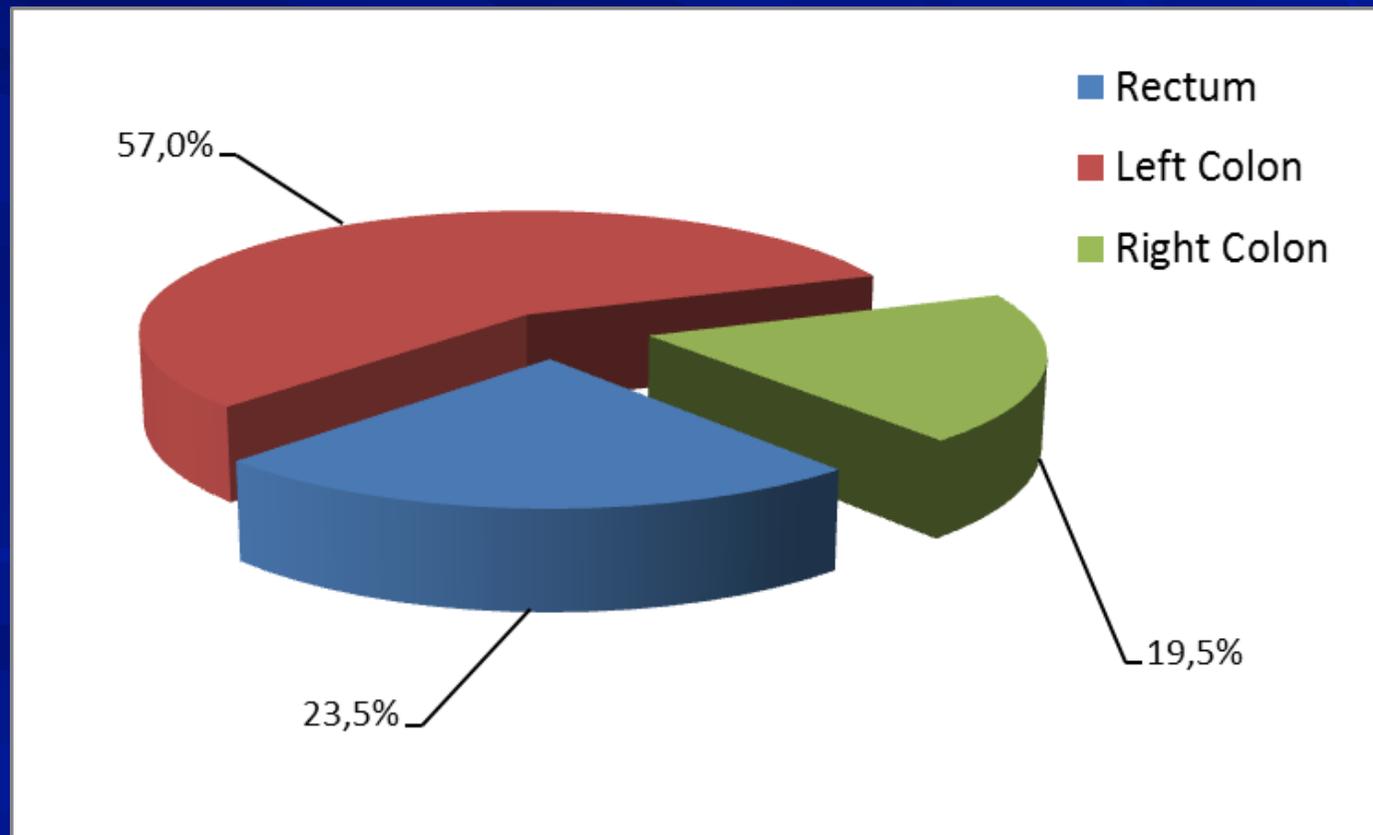
⁵Department of Diagnostic, Medical Sciences and Special Therapies, Surgical Pathology and Cytopathology Unit, University of Padova

⁶Department of Biomedical Sciences and Human Oncology. Università di Torino

⁷UOCA di Anatomia, Istologia Patologica e Citodiagnostica, ULSS 22 Veneto

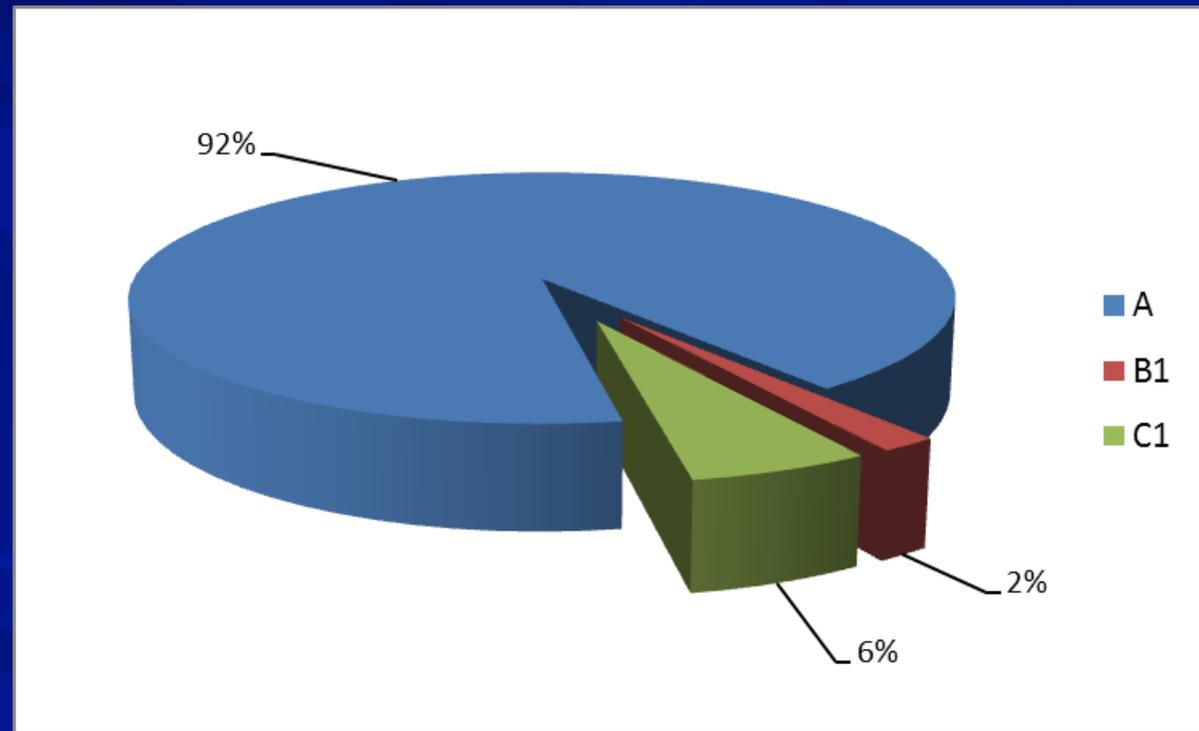
Sede delle lesioni T1 radicalizzate chirurgicamente

Casistica di Trento, Rovereto, Bussolengo, Torino (H.Molinette) e Padova (H.Sant'Antonio)



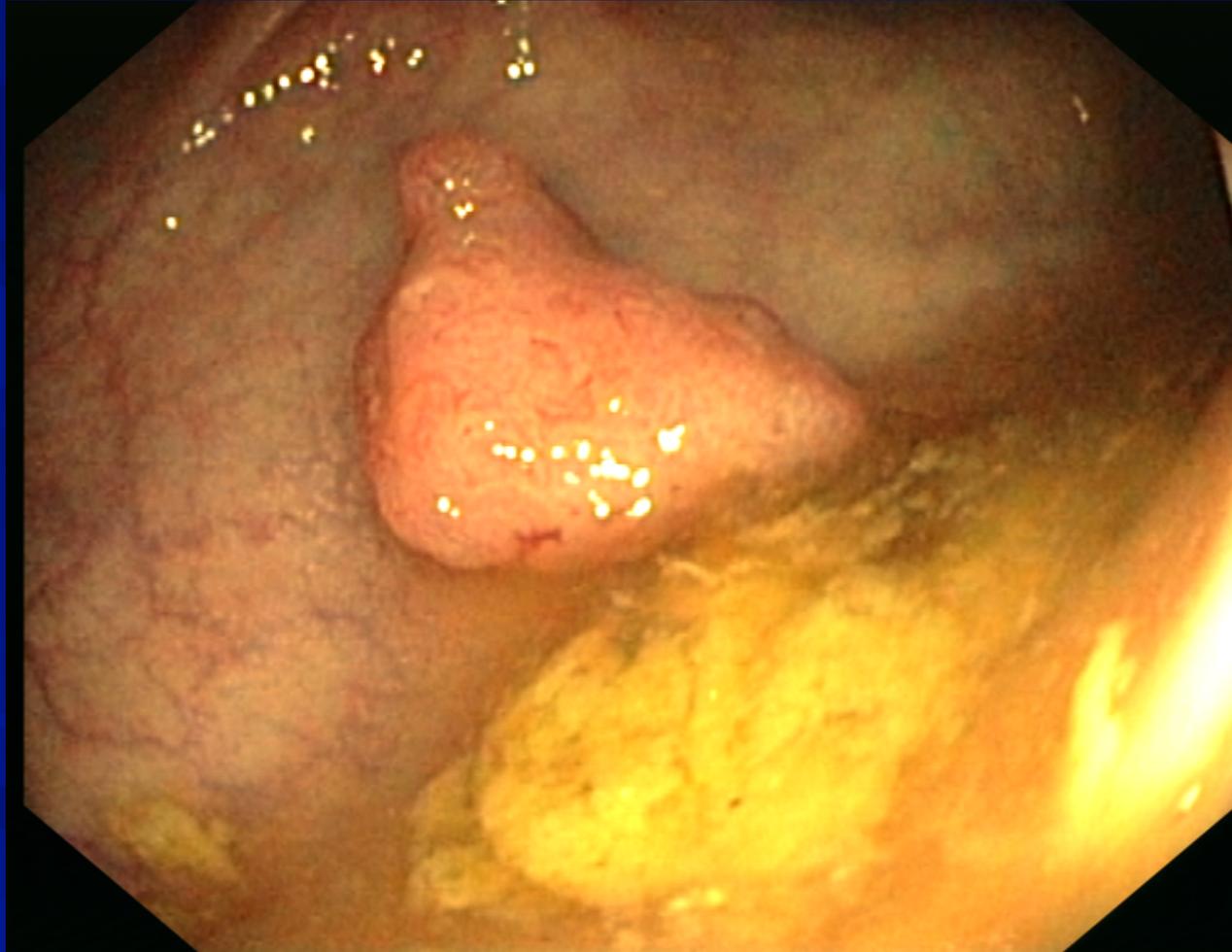
Adenomi cancerizzati inviati secondariamente alla chirurgia (62.3%):

*Diagnosi sul pezzo operatorio secondo
classificazione di Dukes*

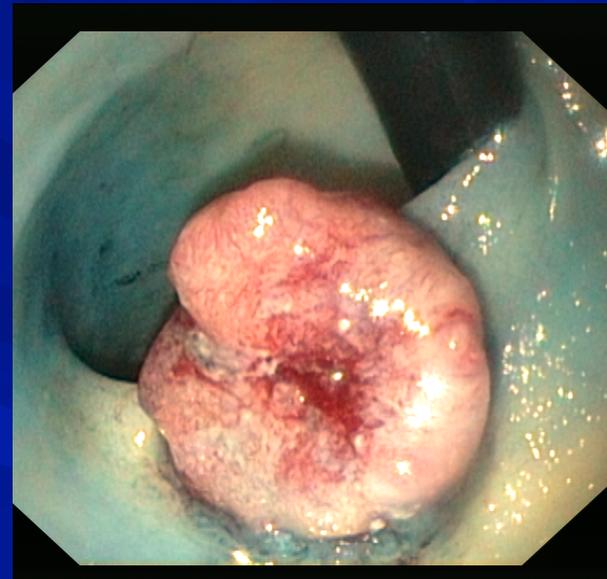
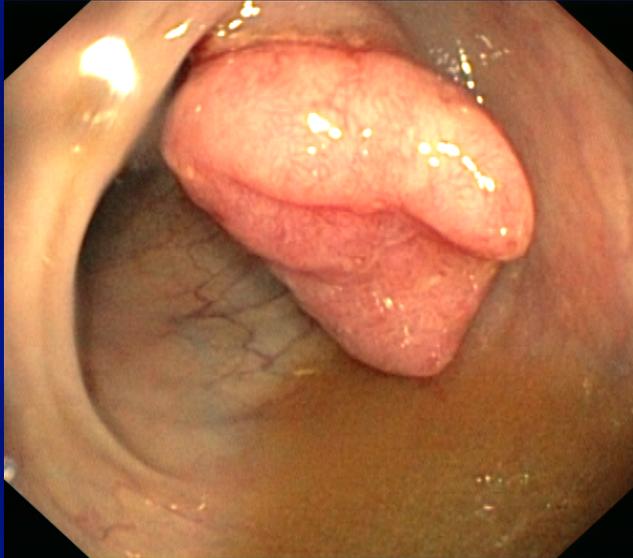


The mean number of resected lymph-nodes at surgery was 7.6 (range 0-37)

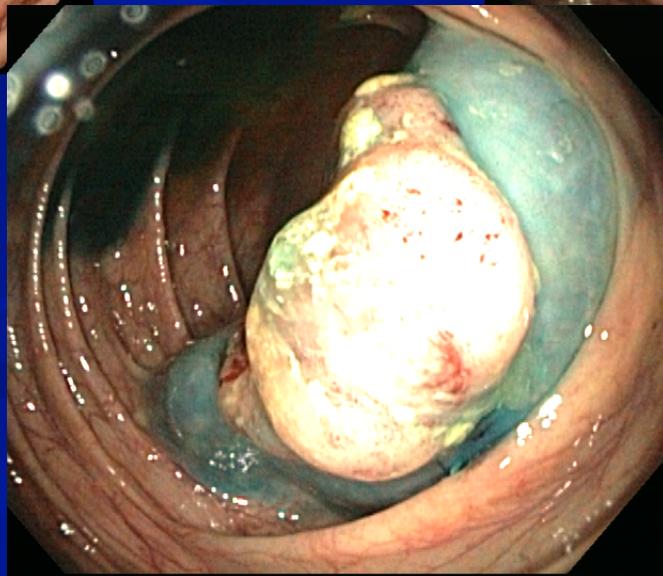
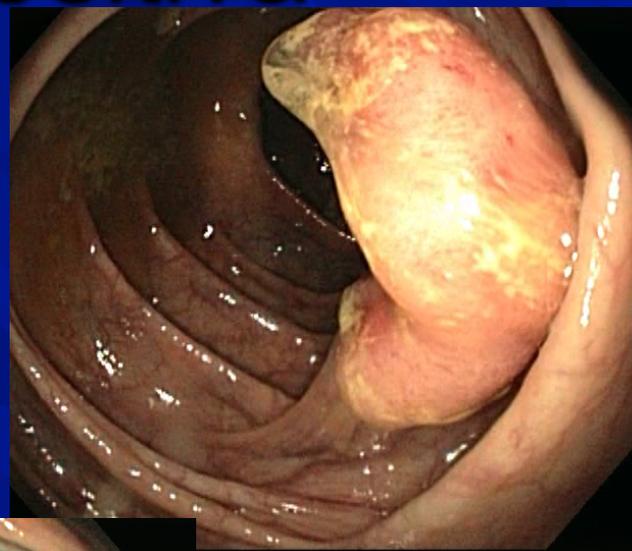
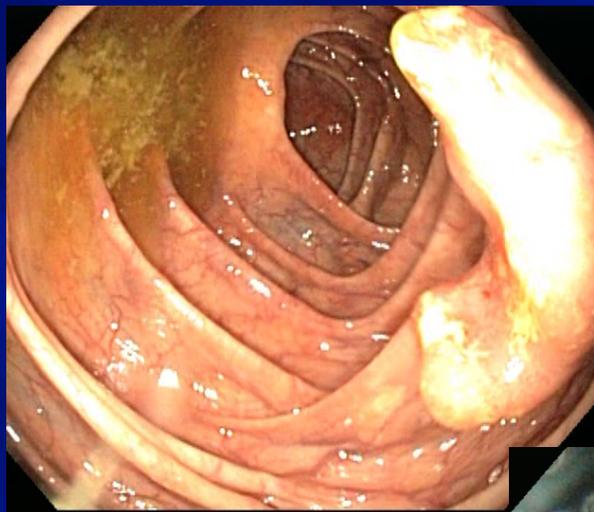
Polipo cancerizzato (T1) low risk



Polipo cancerizzato (T1) High risk chirurgia negativa



Polipo cancerizzato (T1) high risk chirurgia positiva



Follow-up

- Post-chirurgico
- Post-endoscopico

- Colico
- Rettale

- Endoscopico
- Extra-endoscopico

SORVEGLIANZA POST-CHIRURGIA

Linee Guida

Colonscopia

British Association of Gastroenterology (2002)

- se pre-operatoria incompleta: entro 6 mesi
- ogni 5 aa. fino a 70 aa

American Gastroenterology Association (2003)

- se pre-operatoria incompleta: entro 6 mesi
- dopo 3 aa. dall' intervento e poi ogni 5 aa

American Society of Gastrointestinal Endoscopy (2003)

- se pre-operatoria incompleta: entro 6 mesi
- dopo 3 aa. dall' intervento e poi ogni 5 aa

American Cancer Society (2003)

- entro 1 a. dall' intervento, a 3 aa e poi ogni 5 aa

Distinguishing Rectal Cancer versus Colon Cancer Follow Up

- The distinction is based on differences in the rates of local recurrence of rectal versus colon cancer. Specifically, in the case of colon cancer, recurrence at the anastomosis occurs in only 2% to 4% of patients.
- Local recurrence rates of rectal cancer can be 10 or more times higher
- Therefore, for patients who have undergone low anterior resection of rectal cancers, digital rectal examinations and proctoscopy or sigmoidoscopy should be undertaken at three months, six months, one year and two years to look for anastomotic recurrence.

Guidelines for Colonoscopy Surveillance After Polypectomy: A Consensus Update by the US Multi-Society Task Force on Colorectal Cancer and the American Cancer Society

SIDNEY J. WINAWER,* ANN G. ZAUBER,* ROBERT H. FLETCHER,[†] JONATHON S. STILLMAN,*
MICHAEL J. O'BRIEN,[§] BERNARD LEVIN,^{||} ROBERT A. SMITH,[¶] DAVID A. LIEBERMAN,[#]
RANDALL W. BURT,** THEODORE R. LEVIN,^{††} JOHN H. BOND,^{§§} DURADO BROOKS,^{¶¶}
TIM BYERS,^{¶¶} NEIL HYMAN,^{|||} LYNNE KIRK,^{##} ALAN THORSON,^{***} CLIFFORD SIMMANG,^{##}
DAVID JOHNSON,^{†††} and DOUGLAS K. REX^{†††}

*Memorial Sloan-Kettering Cancer Center, New York, New York; [†]Harvard Medical School, Boston, Massachusetts; [§]Boston University School of Medicine, Boston, Massachusetts; ^{||}University of Texas M.D. Anderson Cancer Center, Houston, Texas; [¶]American Cancer Society, Atlanta, Georgia; [#]Oregon Health and Science University, Portland, Oregon; ^{**}Huntsman Cancer Institute at the University of Utah, Salt Lake City, Utah; ^{††}Kaiser Permanente Medical Center, Walnut Creek, California; ^{§§}University of Minnesota, Minneapolis, Minnesota; ^{¶¶}University of Colorado, Denver, Colorado; ^{|||}University of Vermont, Burlington, Vermont; ^{##}University of Texas Southwestern Medical Center, Dallas, Texas; ^{***}Creighton University, Omaha, Nebraska; ^{†††}Eastern Virginia School of Medicine, Norfolk, Virginia; and ^{†††}Indiana University School of Medicine, Indianapolis, Indiana

- After colonoscopic removal of a malignant polyp with favorable risk criteria a follow-up colonoscopy is generally performed in about three to six months to assess the polypectomy site for completeness of removal, particularly if the polyp was sessile.
- If residual cancer is found the individual is referred for surgical resection, providing that the patient is a good surgical candidate.
- If there is no residual cancer, a one-year follow-up colonoscopy may be performed
- if this examination is negative it may be repeated again in three years.

Expert opinion (U.S.A.)

Malignant polyps extra-endoscopic follow-up

- Because the incidence of recurrent cancer is small, no other follow-up laboratory or imaging studies are indicated for these patients.
- John H. Bond, **PRACTICE GUIDELINES**
Polyp Guideline: Diagnosis, Treatment, and Surveillance for Patients With Colorectal Polyps. *Am J Gastroenterol* 2000

ASGE recommendation

- Additional clinical follow-up with CT scanning and other tests such as CEA may be appropriate in selected patients.
- Endoscopic ultrasound is usually not helpful postpolypectomy because of the inflammatory reaction at the polypectomy site and possible reactive changes in regional lymph nodes

Follow-up polipi cancerizzati (proposta IEO)

■ *Basso rischio*

Cea, ecografia (+Rx torace e coendoscopia per i polipi rettali) a 0,6,12,24 mesi

Endoscopia a 1,3,5 anni

■ *Alto rischio*

Cea, ecografia, endoscopia (+Rx torace e ecoendoscopia per i polipi rettali) a 0,6,12,24 mesi

Endoscopia anche al terzo mese

Conclusioni

- Con il progressivo diffondersi delle colonscopie di screening diagnosi e trattamento delle neoplasie del colon-retto limitate alla tonaca sottomucosa stanno assumendo importanza sempre crescente
- Le indicazioni alla terapia chirurgica di tali lesioni – sia essa diretta sia essa post-resezione endoscopica – merita particolare attenzione (invio diretto alla chirurgia, radicalizzazione nei casi dubbi, lesioni rettali)
- Il follow-up di tali lesioni - in particolar modo quello extra-endoscopico – non riconosce ancora protocolli precisi e andrebbe stabilito localmente con modalità condivise multidisciplinari

A photograph of a winter landscape. The scene is dominated by snow-covered trees and a path. The trees are heavily laden with snow, creating a dense, white canopy. The path is a narrow, snow-covered trail that winds through the trees. The overall atmosphere is serene and quiet. The text "Grazie dell'attenzione" is overlaid on the image in a bright yellow font.

Grazie dell'attenzione