SERVIZIO SANITARIO REGIONALE
EMILIA-ROMAGNA

Azienda Ospedaliero-Universitaria di Ferrara
In collaborazione con
Regione Emilia-Romagna
Assessorato alle Politiche per la salute

Seminario regionale

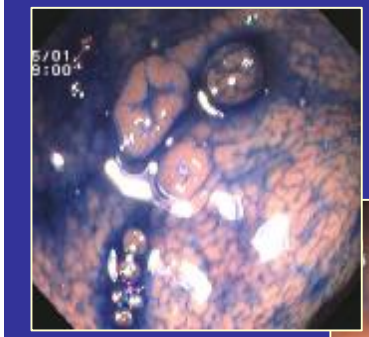
DIAGNOSI E TRATTAMENTO DEI POLIPI COLO-RETTALI
PROBLEMATICHE EMERGENTI
NEL PROGRAMMA DI SCREENING

Ferrara, 30 marzo 2007

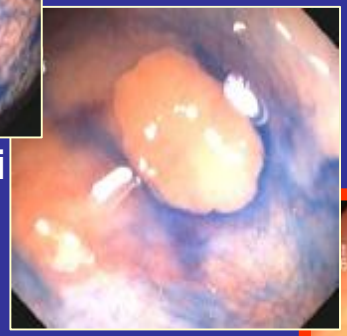
Polipi serrati
aspetti endoscopici e follow-up

VG Matarese

“sequenza adenoma-carcinoma”

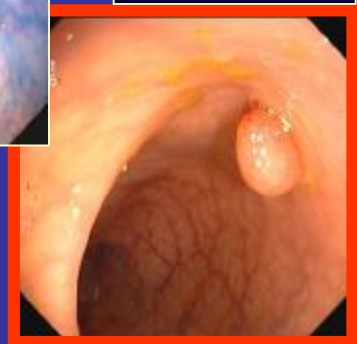


cripte aberranti

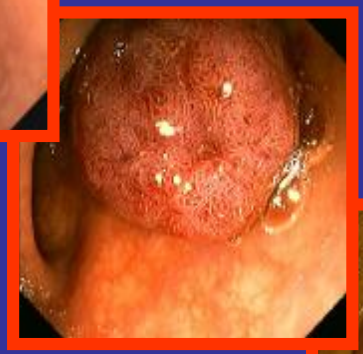


adenoma precoce

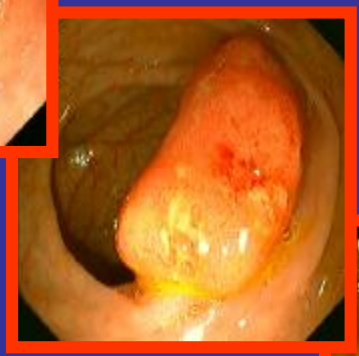
Detectable



adenoma intermedio

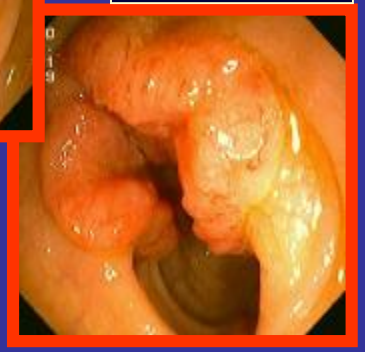


adenoma avanzato



cancro curabile

Terminal



cancro avanzato

tempo
10 anni

da Gizzi G. Mod.

American Journal of Gastroenterology
© 2004 by Am. Coll. of Gastroenterology
Published by Blackwell Publishing

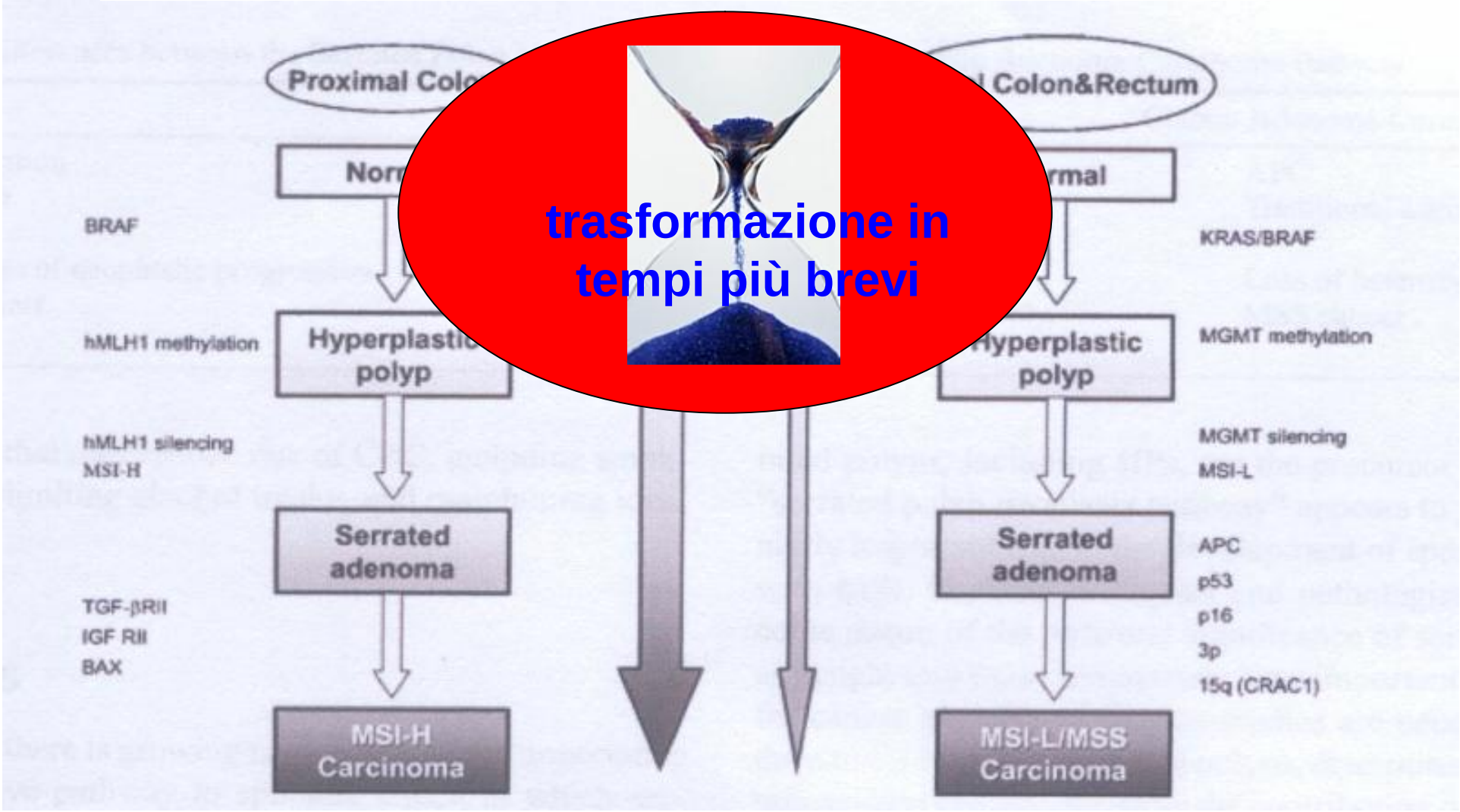
ISSN 0002-9270
doi: 10.1111/j.1572-0241.2004.40131.x

CLINICAL REVIEWS

Hyperplastic Polyps, Serrated Adenomas, and the Serrated Polyp Neoplasia Pathway

Christopher S. Huang, M.D., Michael J. O'Brien, M.D., M.P.H., F.A.C.G., Shi Yang, M.D., and Francis A. Farraye, M.D., M.Sc., F.A.C.G.
Section of Gastroenterology, Boston Medical Center, Boston, Massachusetts, and Department of Pathology and Laboratory Medicine, Boston University School of Medicine, Boston, Massachusetts

(Am J Gastroenterol 2004;99:2242–2255)



doi:10.1111/j.1440-1746.2006.04258.x

GASTROENTEROLOGY

The Vienna classification applied to colorectal adenomas

Carlos A Rubio,*,[1] Gabriella Nesi,* Lucca Messerini,* Gian Carlo Zampi,* Koichi Mandai,[1,2] Masayuki Itabashi[3] and Kaiyo Takubo[4]

*Department of Pathology and Oncology, University of Florence, Florence, Italy, and [1]Department of Pathology, and Laboratory, NHO Higashihiroshima Medical Center, Higashihiroshima City, Hiroshima, [2]Pathology Division, Ibaraki Prefectural Central Hospital and Cancer Center, Tomobe, and [3]Human Tissue Research Group, Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan

Abstract

Background and Aim: In 1999, a group of Western and Asian pathologists gathered in Vienna reached consensus regarding the classification of gastrointestinal epithelial neoplasia. In this study, that classification is applied to colorectal adenomas.

Methods: Colorectal adenomas from 1552 patients were histologically classified according to the categories listed in Vienna: category 3, low-grade dysplasia; 4.1, high-grade dysplasia; 4.2, carcinoma *in situ*; 4.3, suspicious of intramucosal carcinoma; 5.1, intramucosal carcinoma; and 5.2, submucosal carcinoma. The criteria used to diagnose these lesions are described in detail. Adenomas with dysplasia (categories 3 and 4.1) or with carcinoma (categories 4.2, 4.3, 5.1 and 5.2) were analyzed separately. On basis of their configuration, adenomas were classified into tubular, tubulovillous, villous, serrated, microtubular and combined phenotypes (i.e. other than tubulovillous).

Results: The highest percentage of adenomas with carcinoma was found amongst villous adenomas (29.6%), followed by combined adenomas (27.8%). Villous adenoma with carcinoma was the most frequent neoplasia at all ages; combined adenomas with carcinoma were more frequent among younger patients. In elderly patients (≥60 years of age) the highest percentage of adenomas with carcinoma was recorded in villous adenomas (28.1%), followed by serrated adenomas (19.2%). Villous adenomas and combined adenomas with carcinoma were more frequent in males.

Conclusion: The Vienna classification of colorectal adenomas seems to be influenced by parameters inherent to the patient such as age and sex and by the histological phenotype of the adenoma. With the recent improvement in medical technology it is possible to laser-microdisect a defined group of neoplastic glands (such as with carcinoma *in situ* or with intramucosal carcinoma) for specific molecular analysis. This modern technology will permit in future the translation of histological structures into molecular terms.

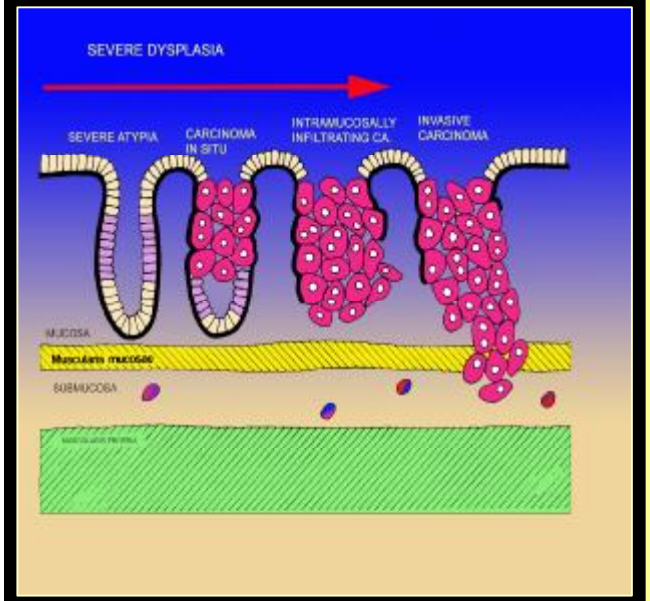
Classificazione delle lesioni “serrate” del colon

Hyperplastic polyps (there are actually three morphological subtypes but these are usually not reported)
- Goblet-cell rich variant
- Microvesicular variant
- Mucin-poor variant

Sessile serrated polyp (also known as sessile serrated adenoma)
Serrated adenoma (‘traditional’ serrated adenoma)
Traditional adenomas (tubular, villous, etc.) with serrations
Mixed polyps (any of the above in combination)
- Hyperplastic polyp and traditional adenoma
- Hyperplastic polyp and serrated adenoma

Polyposis syndromes (hyperplastic polyposis, mixed polyposis)
Serrated carcinoma

Cunningham KS, Riddell RH Curr Opin Gastroenterol 2006



Lesioni neoplastiche precoci del colon

Classificazione macroscopica di Parigi

Protruding

I p
pedunculated

I sp
semipedunculated

I s
sessile

Non-Protruding

II a
Elevated (superficial)

II a large (>10mm) – LST Granular

II a large (>10mm) – LST Non-Granular

II b
Flat

II c
Depressed

II a + II c – Depresse

Soetikno RM - Curr Opin Gastroenterol - 2003

OGGI NON RIUSCIAMO A RICONOSCERE ENDOSCOPICAMENTE LESIONI DI TIPO SERRATO

E' COSI' IMPORTANTE ARRIVARE AL RICONOSCIMENTO ENDOSCOPICO?

SE SI', QUALI STRUMENTI DOBBIAMO AVERE PER RAGGIUNGERE QUESTO OBIETTIVO?

Dimensione del problema

The serrated polyp comes of age
Editorials November 2006 Lauwers JI, Chung DC
Gastroenterology, vol 131, n°5

Impatto complessivo degli AS sul rischio di cancro nella popolazione generale incerto perché la prevalenza è ancora sconosciuta

Difficoltà ad identificare endoscopicamente tali lesioni a causa della conformazione spesso piatta e di colorito pallido

Riconoscimento attraverso la **cromoendoscopia/ magnificazione**

Digestive Endoscopy (2005) **17**, 105–116

REVIEW

EFFICACY OF MAGNIFYING CHROMOENDOSCOPY FOR THE DIFFERENTIAL DIAGNOSIS OF COLORECTAL LESIONS

YASUSHI SANO,* YUTAKA SAITO,† KUANG-I FU,* TAKAHISA MATSUDA,† TOSHIO URAOKA,† NOZOMU KOBAYASHI,† HIROAKI ITO,* HIROHISA MACHIDA,* JUNKO IWASAKI,* FABIAN EMURA,† MASAO HANAFUSA,* TAKAYUKI YOSHINO,* SHIGEHARU KATO* AND TAKAHIRO FUJII†

**Division of Digestive Endoscopy and Gastrointestinal Oncology, National Cancer Center Hospital East, Chiba and †Division of Endoscopy, National Cancer Center Hospital, Tokyo, Japan*

Table 1. Previous studies investigating overall diagnostic accuracy, sensitivity, specificity and predictive values in differentiating non-neoplastic lesions from neoplastic lesions

Reference	Colonoscopy apparatus	No. lesions	Overall accuracy (%)	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)
Chapius *et al.*[26]	Ordinary	120	82.5	84.5	77.7	89.8	68.3
Neale *et al.*[24]	Ordinary	81	80.2	69.2	85.4	69.2	85.5
Our results[31]	Ordinary	206	84	88.8	67.4	93.4	63.3
Eisen *et al.*[28]	Chromoendoscopy	480	82.1	82	82	75	88
Kiesllich *et al.*[7]	Chromoendoscopy	283	92.6	92.4	93.2	97.5	81
Our results[31]	Chromoendoscopy	206	89.3	93.1	76.1	93.1	76.1
Axelrad *et al.*[32]	Magnifying	55	94.5	92.9	95.1	86.7	97.5
Togashi *et al.*[29]	Magnifying	923	88.4	92	73.3	94.2	85.2
Tung *et al.*[33]	Magnifying	175	80.6	93.8	64.6	76.3	89.5
Liu *et al.*[34]	Magnifying	954	86.1	90.8	72.7	90.4	73.6
Our results[31]	Magnifying	206	95.6	96.3	93.5	98.1	87.8

NPV, negative predictive value; PPV, positive predictive value.

Comparative Study of Conventional Colonoscopy, Chromoendoscopy, and Narrow-Band Imaging Systems in Differential Diagnosis of Neoplastic and Nonneoplastic Colonic Polyps

Studiati consecutivamente 78 pazienti con evidenza di 110 polipi colo-rettali

Table 3. The Statistical Analysis Among Conventional Colonoscopy, Narrow Band Imaging, and Chromoendoscopy

	Sensitivity (95% CI)	Specificity (95% CI)	PPV (95% CI)	NPV (95% CI)	Accuracy (95% CI)
Conventional colonoscopy	82.9% (71.6–90.4)	80.0% (63.9–90.4)	87.9% (77.0–94.3)	72.7% (57.0–84.5)	81.8% (74.5–89.1)
NBI	95.7% (87.2–98.9)	87.5% (72.4–95.3)	93.% (83.9–97.4)	92.1% (77.5–97.9)	92.7% (87.8–97.7)
Chromoendoscopy	95.7% (87.2–98.9)	87.5% (72.4–95.3)	93.% (83.9–97.4)	92.1% (77.5–97.9)	92.7 (87.8–97.7)
P value	0.014	0.363	0.298	0.040	0.015

PPV = positive predictive value; NPV = negative predictive value; 95% CI = 95% confidence interval.

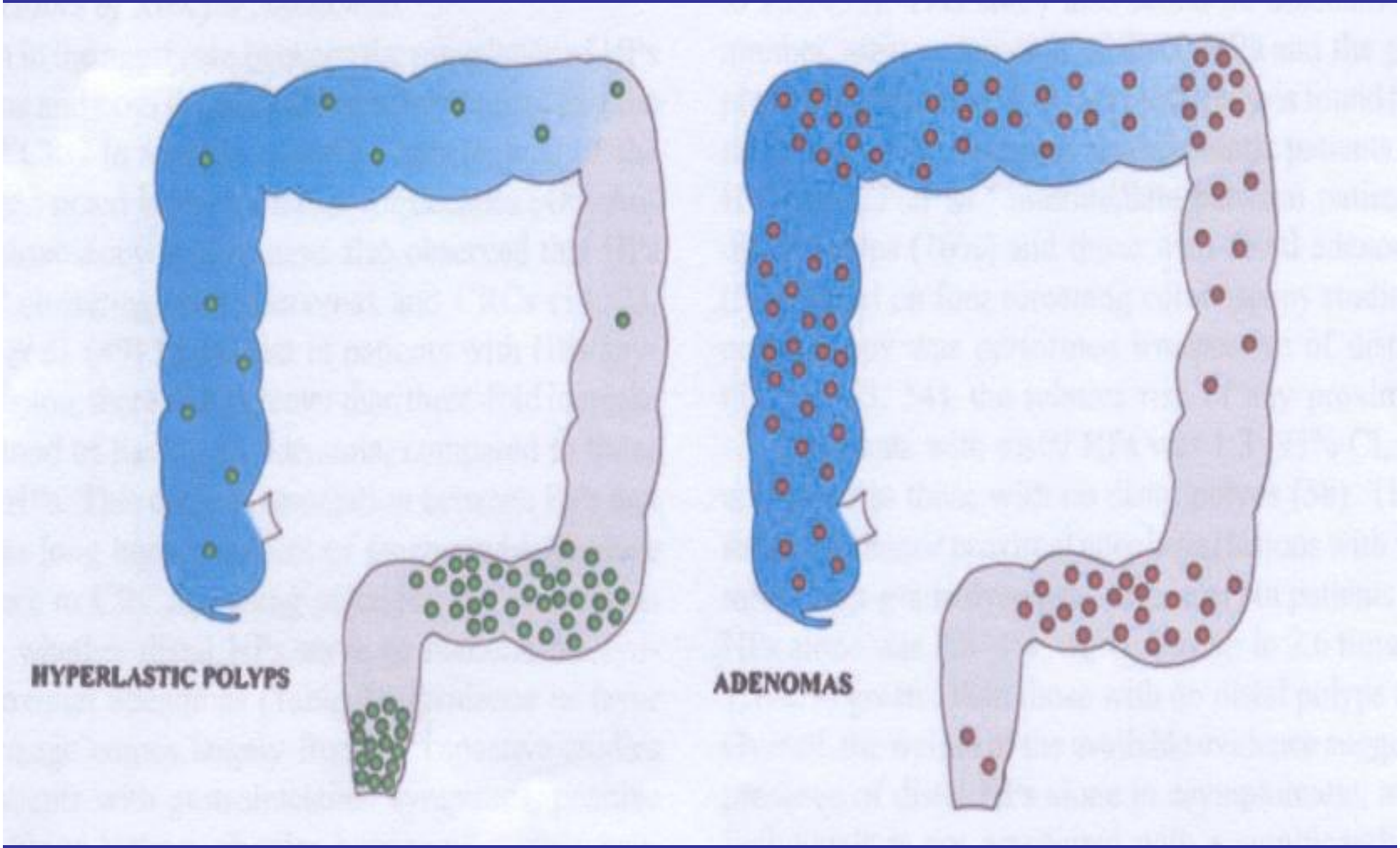
Ming-Yao Su, Am J Gastroenterol 2006

Aspetti clinici dei polipi iperplastici

- Generalmente asintomatici
- Occasionalmente sanguinamento rettale per polipi > dimensioni
- Diagnosi possibile in tutte le età e sesso

Burt R, Jass JR WHO 2000

distribuzione polipi iperplastici e adenomi nel colon-retto



Huang CS, Am J Gastroenterol 2004

POLIPOSI IPERPLASTICA

- Entità ben definita e distinta dai piccoli polipi iperplastici sporadici
- Sebbene venga considerata una condizione rara, è probabilmente sottostimata
- Più stretta associazione con la neoplasia colo-rettale
- Reports di gruppi familiari

CRITERI DIAGNOSTICI

1. **Almeno 5 PI situati prossimalmente al sigma, dei quali almeno 2 >1 cm**
2. **Qualsiasi numero di PI prossimali al sigma in soggetti con familiari di I° grado affetti da poliposi iperplastica**
3. **>30 PI di ogni dimensione, situati nell'intero colon**

Burt R, Jass JR WHO 2000

Management of Portuguese Patients with Hyperplastic Polyposis and Screening of At-Risk First-Degree Relatives: A Contribution for Future Guidelines Based on a Clinical Study

P. Lage, M.D., M. Cravo, M.D., Ph.D., R. Sousa, M.D., P. Chaves, M.D., Ph.D., M. Salazar, M.D., R. Fonseca, M.D., I. Claro, M.D., A. Suspiro, M.D., P. Rodrigues, R.N., M.S., H. Raposo, M.S., P. Fidalgo, M.D., and C. Nobre-Leitão, M.D., Ph.D.
Instituto Português de Oncologia Francisco Gentil, CRL, SA, Portugal

BACKGROUND: Hyperplastic polyposis (HP) is a rare condition characterized by the presence of multiple hyperplastic polyps in the colon, which has been associated to an increased risk of colorectal cancer (CRC). Guidelines for management of this disease remain, so far, undefined.

AIMS: To evaluate, in symptomatic patients with HP, phenotypic characteristics as well as results of a screening program in their at-risk first-degree relatives.

PATIENTS AND METHODS: Pedigree information and clinical and endoscopic data of 14 patients with HP was studied. Seventeen at-risk first-degree relatives from six families were also invited to perform screening colonoscopy.

RESULTS: Twelve of fourteen (86%) patients had fewer than 100 colorectal polyps. Polyps' sizes ranged from 2 to 25 mm and were uniformly distributed through the whole colon in 43% of the patients. Hyperplastic polyps predominated, but 11/14 (79%) patients also harbored serrated as well as classic adenomatous polyps. CRC was present in 6/14 (43%) of the patients at the time of diagnosis. Familial history of CRC/polyps was positive in 6/12 (50%) of cases. Colonoscopy in at-risk relatives disclosed polyps in 10/17 (59%) of cases with at least one additional patient having criteria for HP.

CONCLUSIONS: Although small, this series demonstrates that a high level of suspicion is needed to diagnose the HP syndrome, in which serrated adenomas seem to be the hallmark. Although an elevated percentage of CRC was observed in this series of symptomatic patients with HP, prospective studies in asymptomatic individuals are needed to clearly quantify the risk of CRC in patients with HP. Because familial aggregation of HP was present in 3/12 (25%) of kindreds, screening colonoscopy should be offered to first-degree relatives.

(Am J Gastroenterol 2004;99:1779–1784)

PROBLEMATICHE

Come fa l'endoscopista a riconoscere e differenziare le lesioni "serrate" dalle altre forme polipoidi?

Ci sono caratteristiche morfologiche che possono aiutare nella individuazione?

Quali sono le conoscenze ad oggi?

PubMed www.pubmed.gov

A service of the National Library of Medicine and the National Institutes of Health

My NCBI [Sign In] [R

ubMed Nucleotide Protein Genome Structure OMIM PMC Journals

for endoscopic serrated adenoma Go Clear

Limits Preview/Index History **Clipboard*** Details

Display Summary Show 5 Sort by Send to

All: 10 Review: 0

Items 1 - 5 of 10 Page 1 of

1: Spring KJ, Zhao ZZ, Karamatic R, Walsh MD, Whitehall VL, Pike T, Simms LA, Young J, James M, Montgomery GW, Appleyard M, Hewett D, Togashi K, Jass JR, Leggett BA. Related Articl

High prevalence of sessile serrated adenomas with BRAF mutations: a prospective study of patients undergoing colonoscopy.
Gastroenterology. 2006 Nov;131(5):1400-7. Epub 2006 Aug 18.
PMID: 17101316 [PubMed - indexed for MEDLINE]

2: Zhang WW, Ren BJ, Tong HS, Zhang YL, Jiang P. Relate

[Endoscopic and histopathological features of serrated adenoma of large intestine:an analysis of 71 cases]
Zhonghua Wei Chang Wai Ke Za Zhi. 2006 May;9(3):250-2. Chinese.
PMID: 16721690 [PubMed - in process]

3: Jaramillo E, Tamura S, Mitomi H. Related Articl

Endoscopic appearance of serrated adenomas in the colon.
Endoscopy. 2005 Mar;37(3):254-60. No abstract available.
PMID: 15731942 [PubMed - indexed for MEDLINE]

4: Lage P, Cravo M, Sousa R, Chaves P, Salazar M, Fonseca R, Claro I, Suspiro A, Rodrigues P, Raposo H, Fidalgo P, Nobre-Leitao C. Related Articl

Management of Portuguese patients with hyperplastic polyposis and scre of at-risk first-degree relatives: a contribution for future guidelines based clinical study.
Am J Gastroenterol. 2004 Sep;99(9):1779-84.
PMID: 15330918 [PubMed - indexed for MEDLINE]

5: Oka S, Tanaka S, Hiyama T, Ito M, Kitadai Y, Yoshihara M, Haruma K, Chayama K. Related Articl

Clinicopathologic and endoscopic features of colorectal serrated adenom differences between polypoid and superficial types.
Gastrointest Endosc. 2004 Feb;59(2):213-9.
PMID: 14745394 [PubMed - indexed for MEDLINE]

Items 1 - 5 of 10 Page 1 of

Display Summary Show 5 Sort by Send to

Write to the Help Desk

PubMed www.pubmed.gov

A service of the National Library of Medicine and the National Institutes of Health

My NCBI [Sign In] [R

PubMed Nucleotide Protein Genome Structure OMIM PMC Journals

for endoscopic serrated adenoma Go Clear

Limits Preview/Index History **Clipboard*** Details

Display Summary Show 5 First Author Send to

All: 10 Review: 0

Items 1 - 5 of 10 Page 1 of

1: Jaramillo E, Tamura S, Mitomi H. Related Articl

Endoscopic appearance of serrated adenomas in the colon.
Endoscopy. 2005 Mar;37(3):254-60. No abstract available.
PMID: 15731942 [PubMed - indexed for MEDLINE]

2: Jaramillo E, Watanabe M, Rubio C, Slezak P. Related Articl

Small colorectal serrated adenomas: endoscopic findings.
Endoscopy. 1997 Jan;29(1):1-3.
PMID: 9083728 [PubMed - indexed for MEDLINE]

3: Lage P, Cravo M, Sousa R, Chaves P, Salazar M, Fonseca R, Claro I, Suspiro A, Rodrigues P, Raposo H, Fidalgo P, Nobre-Leitao C. Related Articl

Management of Portuguese patients with hyperplastic polyposis and scre of at-risk first-degree relatives: a contribution for future guidelines based clinical study.
Am J Gastroenterol. 2004 Sep;99(9):1779-84.
PMID: 15330918 [PubMed - indexed for MEDLINE]

4: Matsumoto T, Mizuno M, Shimizu M, Manabe T, Iida M. Related Articl

Clinicopathological features of serrated adenoma of the colorectum: comparison with traditional adenoma.
J Clin Pathol. 1999 Jul;52(7):513-6.
PMID: 10605404 [PubMed - indexed for MEDLINE]

5: Matsumoto T, Mizuno M, Shimizu M, Manabe T, Iida M, Fujishima M. Related Articl

Serrated adenoma of the colorectum: colonoscopic and histologic feature
Gastrointest Endosc. 1999 Jun;49(6):736-42.
PMID: 10343219 [PubMed - indexed for MEDLINE]

Items 1 - 5 of 10 Page 1 of

Display Summary Show 5 First Author Send to

Write to the Help Desk

Prevalenza AS

Patients Studied	SAs Among All Patients Studied (%)	SAs as a Percentage of All Polyps (%)	SAs as a Percentage of All Adenomas (%)	Reference
NA	—	<0.6	—	1
232	7	—	11	101
1,225	2.9	—	—	102
3,279	1.3	—	1.7	104
1474	2	—	1.3	103
4,338	—	1.8	—	99
919	1	3.5	5	100

Huang et al, Am J Gastroenterol 2004

Rapporto uomo/donna
2:1
Età media alla diagnosi
60-65 aa

Barion C et al, Mod Pathol 2003

PO Box 2345, Beijing 100023, China
www.wjgnet.com
wjg@wjgnet.com

World J Gastroenterol 2006 May 7; 12(17): 2770-2772
World Journal of Gastroenterology ISSN 1007-9327

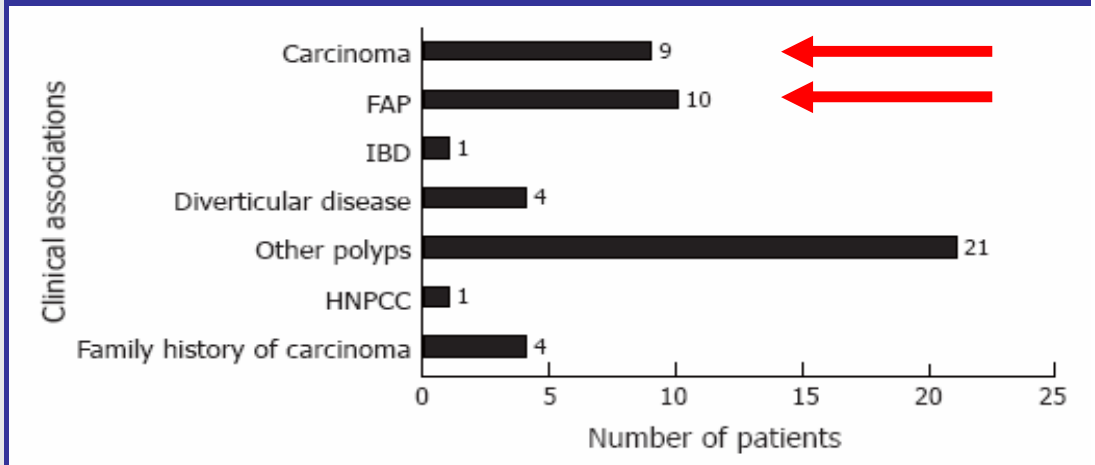
RAPID COMMUNICATION

Clinico-pathological aspects of colorectal serrated adenomas

Ashish Chandra, Adnan A Sheikh, Anton Cerar, Ian C Talbot

Table 1 Details of the 4536 polyps studied

Types of adenoma	*n* (%)
Tubular adenoma	
Mild	3582 (78.8)
Moderate	114 (2.5)
Severe	18 (0.4)
Tubulovillous adenomas	
Mild	87 (1.9)
Moderate	32 (0.7)
Severe	5 (0.1)
Villous adenomas	
Mild	5 (0.1)
Moderate	0 (0)
Severe	0 (0)
Hyperplastic adenomas	600 (13.5)
Serrated adenomas	91 (2)
Invasive carcinoma	14 (1.3)

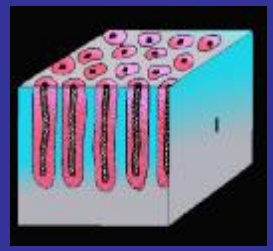


strumenti utilizzati

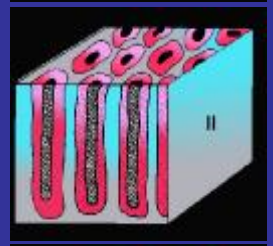
- Endoscopi ad alta definizione
- Endoscopi a Magnificazione
- Cromoscopia con indaco-carminio 0,4-1% o crystal violet 0.05-1%

Classificazione di Kudo

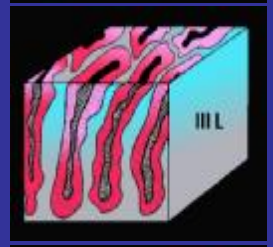
identificazione “Pit Pattern”



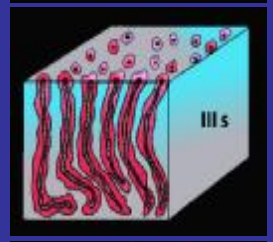
pits rotondeggianti,
regolari per dimensioni e disposizione
Mucosa normale



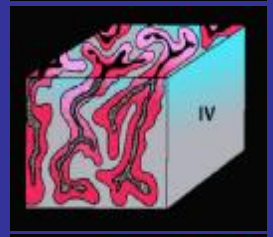
pits più larghi, di forma stellata ma regolarmente distribuiti
Polipo iperplastico



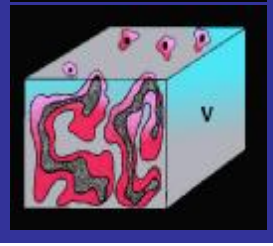
pits più allungati
Adenoma protrudente



pits più piccoli e depressi
Adenoma depresso



pits con aspetto ramificato
Adenoma tubulo-villoso
o ca intramucoso



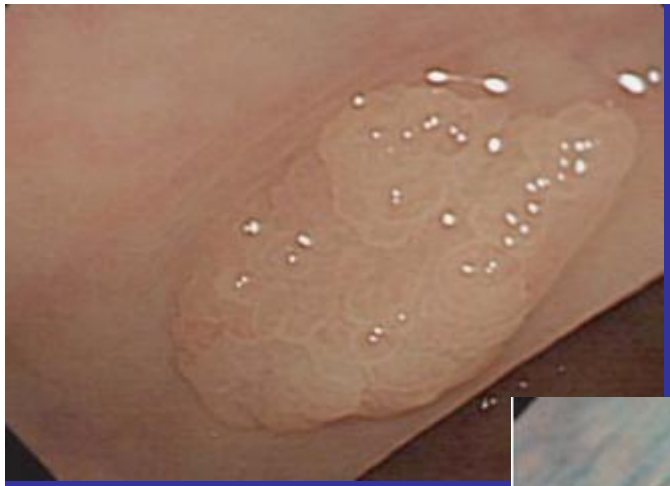
pits irregolarmente distribuiti, irregolari, pattern non strutturato
Cancro invasivo

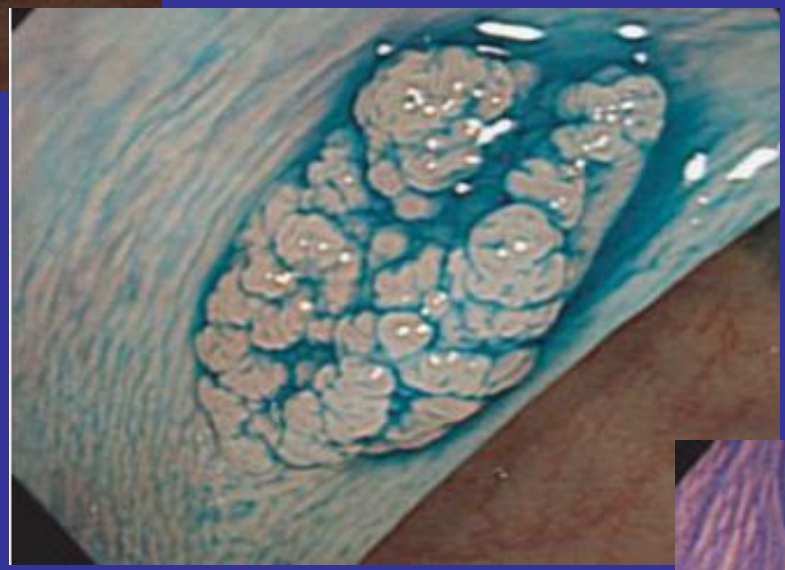
da Gizzi G., mod

Sano Y, Digestive Endoscopy 2005

102 lesioni serrate osservate in 4 anni ’99-’03

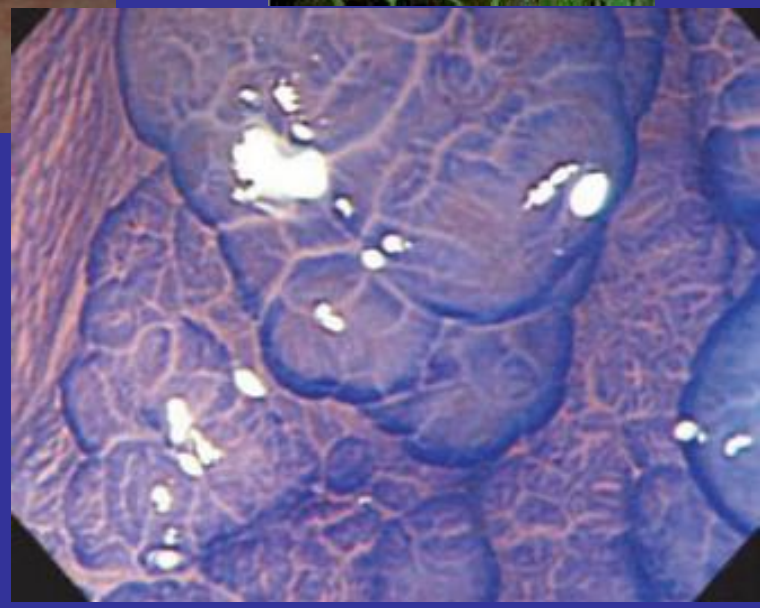
adenoma serrato sessile





colorazione con

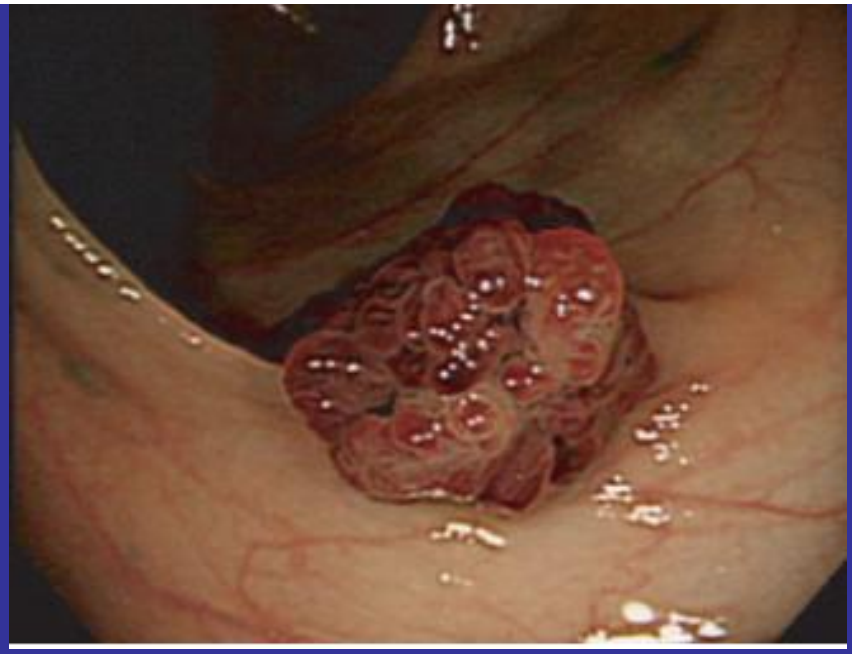
indaco-carminio



Magnificazione: IIIH pit pattern “fern-like”

(simile al tipo II ma più arrotondato)

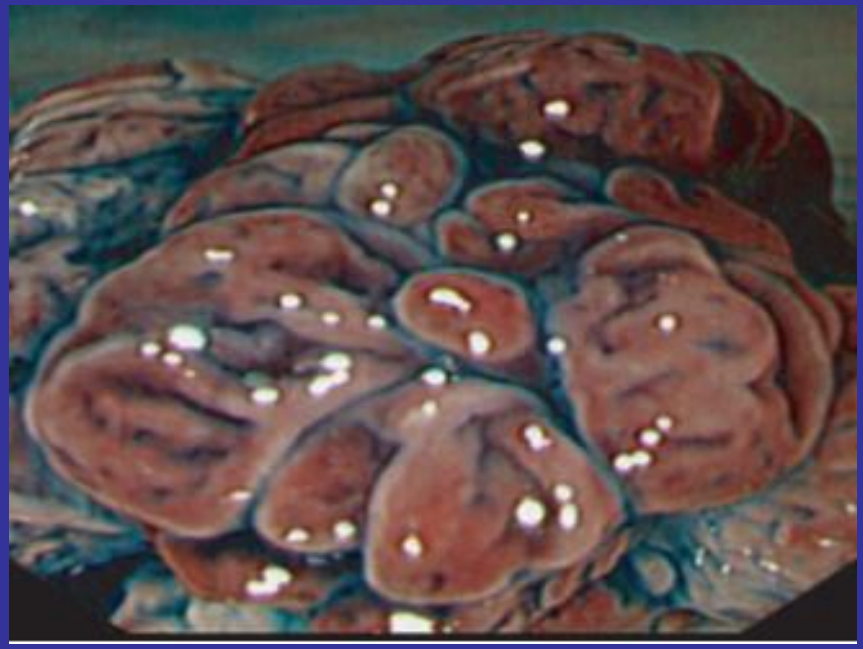
AS senza magnificazione



Sano Y
Digestive Endoscopy, 2005

adenoma serrato protrudente

AS con magnificazione



IVH pit pattern

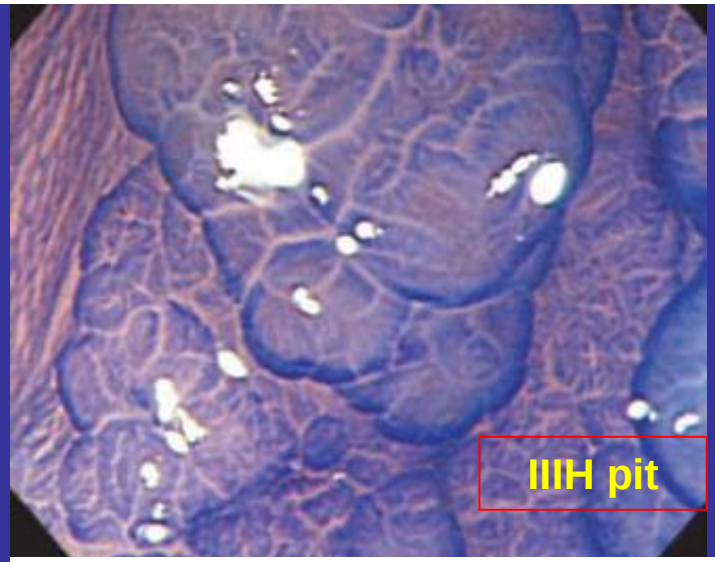
“pinecone appaerance”

Table 3. Clinicopathological characteristics of lesions diagnosed as serrated adenoma histologically[†]

Total number (cases/lesions)	102/102
Age (years)	60.9 (31–82)
Gender (M/F)	70/32
Macroscopic type	
Pedunculated	12 (11.7%)
Semipedunculated	27 (26.5%)
Sessile	44 (43.2%)
Flat	19 (18.6%)
Size (mm)	7.4 (2–28)
≤5 mm	49 (48.0%)
5 mm < > 10 mm	36 (35.3%)
10 mm <	17 (16.7%)
Location	
Cecum/ascending/transverse	28 (2/11/15)
Descending/sigmoid	43 (6/37)
Rectum	31
Pit pattern	
IIIH/IVH/others	69/21/12

[†] National Cancer Center Hospital East, January 1999–June 2003.

Sano Y, Digestive Endoscopy, 2005



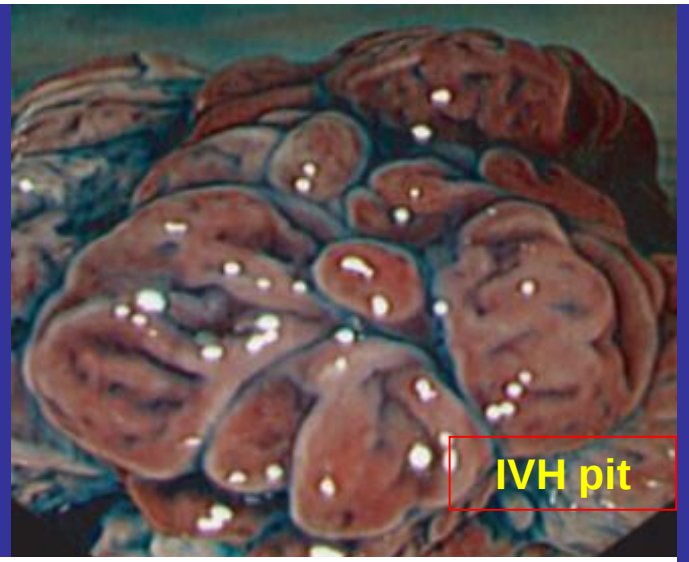


Table 5. Relationship between IIIH/IVH pit for the serrated adenoma and histological findings

Pit pattern of endoscopic SA	Histological finding SA	non-SA	Accuracy rate (%)
IIIH ($n = 69$)	25	44	36.2
IVH ($n = 21$)	19	2	90.5
Overall ($n = 90$)	44	46	48.9

SA, serrated adenoma; non- SA, histological hyperplastic polyp.

Sano Y, Digestive Endoscopy, 2005

Endoscopic Appearance of Serrated Adenomas in the Colon

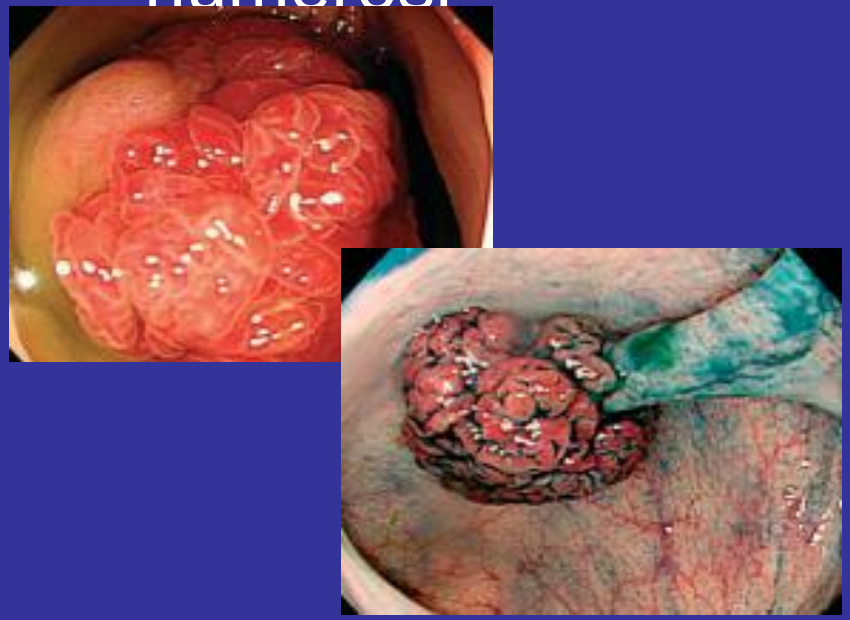
E. Jaramillo[1]
S. Tamura[2]
H. Mitomi[3]

Bibliography
Endoscopy 2005; 37 (3): 254–260 © Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X
DOI 10.1055/s-2005-861007

ASPETTI MACROSCOPICI

Forme polipoidi

- situati più spesso nel colon distale e retto
- numerosi



Forme non polipoidi

- situati nell'intero colon
- più grossi nel colon dx
- diametro maggiore delle forme polipoidi

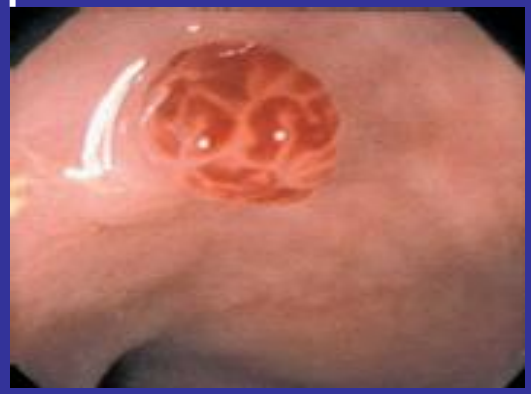
Endoscopic Appearance of Serrated Adenomas in the Colon

E. Jaramillo[1]
S. Tamura[2]
H. Mitomi[3]

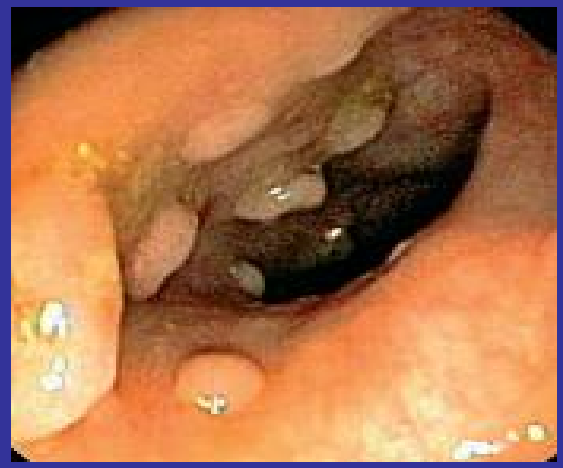
FORME POLIPOIDI

AS polipoidi piccole dimensioni

- Piccoli noduli ben delimitati e spesso a superficie rossastra

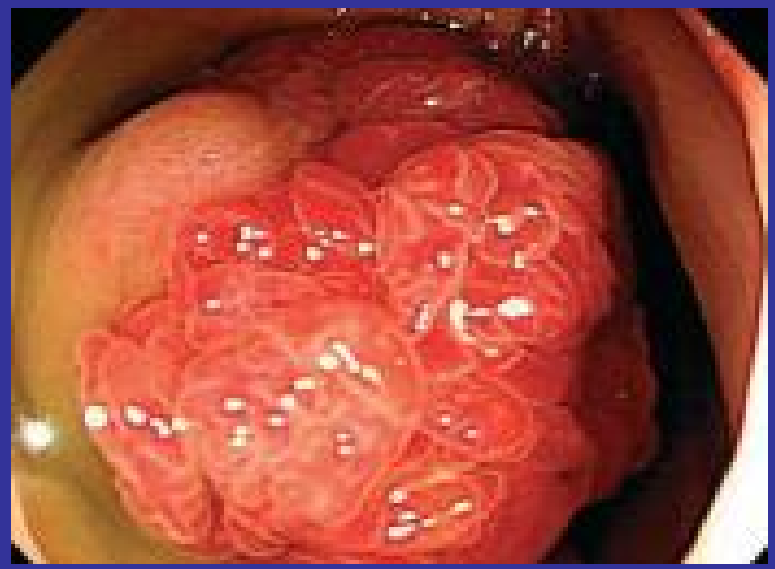


- Inseriti nel contesto di “veri” polipi iperplastici



AS polipoidi di grosse dimensioni

- Più simili agli adenomi > 1 cm
- Testa del polipo di colorito rossastro e lobulato



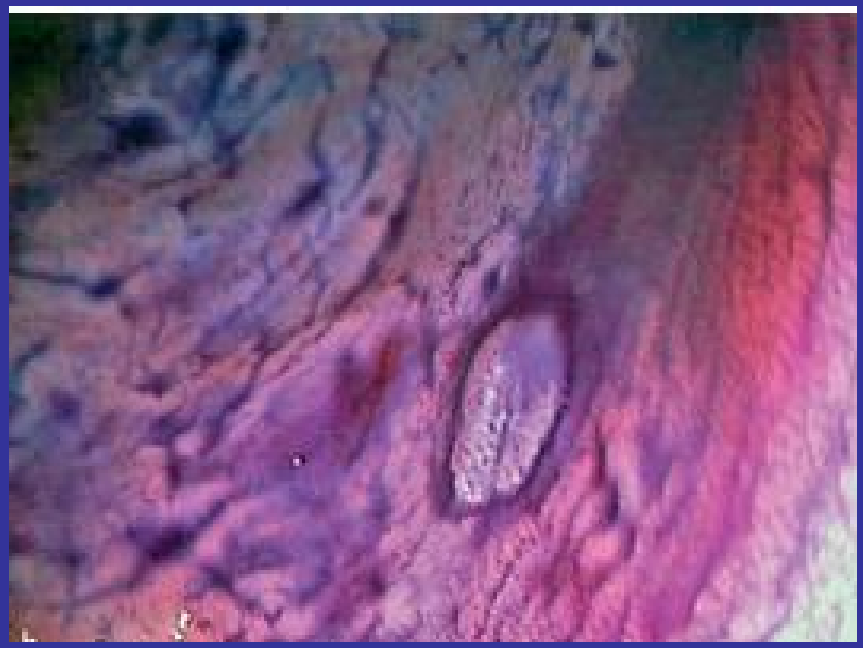
Endoscopic Appearance of Serrated Adenomas in the Colon

E. Jaramillo[1]
S. Tamura[2]
H. Mitomi[3]

FORME PIATTE

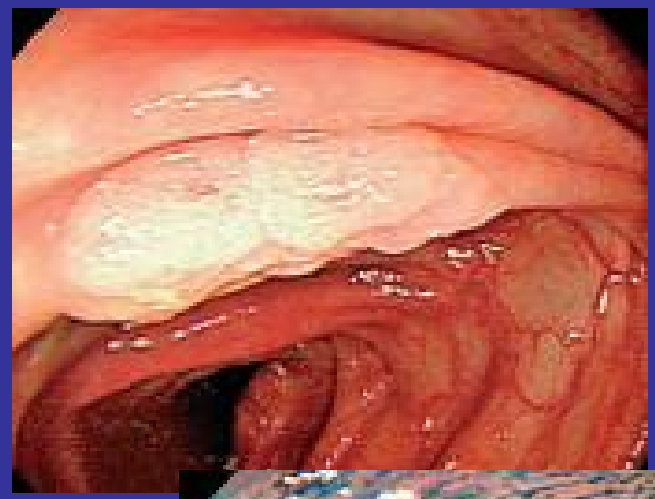
AS piatti di piccole dimensioni

- “spots” biancastri con contorno ben definito



AS piatti di grosse dimensioni

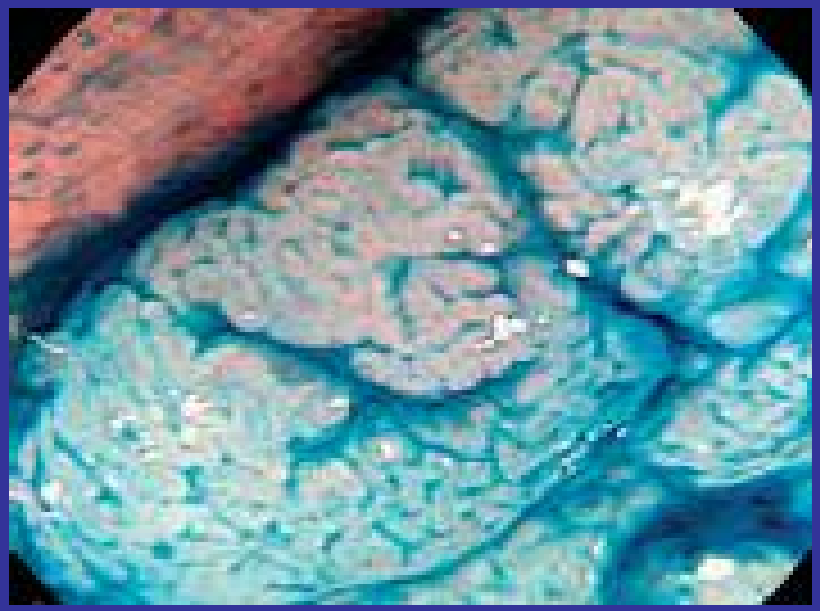
- Polipi biancastri a superficie liscia, granulare o nodulare



classificazione di Kudo aggiornata in base all'aspetto endoscopico degli AS

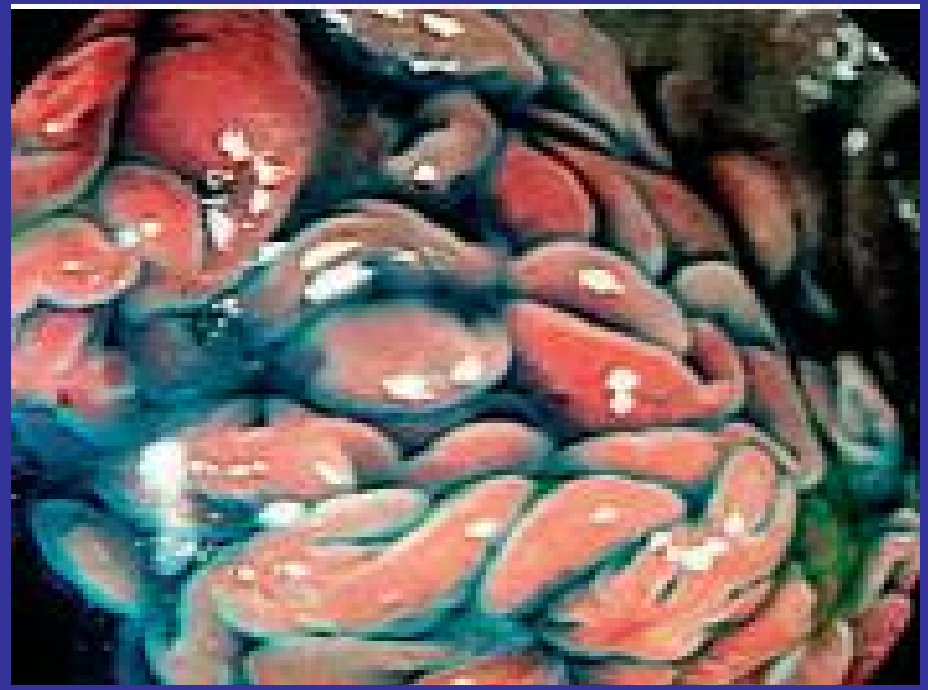
TIPO IIISA

- Orifizio delle fossette ghiandolari di forma ovalare-allungata o "stellar-like"



TIPO IVSA

- Orifizio "flower petal-like" o "pineal-like"



Jaramillo E et al, Endoscopy 2005

High Prevalence of Sessile Serrated Adenomas With *BRAF* Mutations: A Prospective Study of Patients Undergoing Colonoscopy

GASTROENTEROLOGY 2006;131:1400–1407

KEVIN J. SPRING,* ZHEN ZHEN ZHAO,* ROZEMARY KARAMATIC,* MICHAEL D. WALSH,‡ VICKI L. J. WHITEHALL,* TANYA PIKE,* LISA A. SIMMS,* JOANNE YOUNG,‡ MICHAEL JAMES,* GRANT W. MONTGOMERY,* MARK APPLEYARD,‖ DAVID HEWETT,‖ KAZUTOMO TOGASHI,¶ JEREMY R. JASS,‡ and BARBARA A. LEGGETT*

- 190 pz consecutivi sottoposti a Cromoendoscopia con Magnificazione

Indication for colonoscopy	No. of patients without polyps (n = 53)	No. of patients with polyps (n = 136)	*P* value
Abdominal symptoms	23 (43)	36 (26)	.035
Anemia	15 (28)	21 (15)	NS
Family history of colorectal cancer	4 (8)	17 (13)	NS
Hematochezia	5 (9)	26 (19)	NS
Surveillance after colorectal cancer	3 (6)	8 (6)	NS
Surveillance after colorectal polyps	3 (6)	28 (21)	.015

NOTE. All values are expressed as n (%) unless otherwise indicated.

Numero totale di polipi riscontrati: 414

High Prevalence of Sessile Serrated Adenomas With *BRAF* Mutations: A Prospective Study of Patients Undergoing Colonoscopy

GASTROENTEROLOGY 2006;131:1400–1407

Table 3. Polyp Characteristics

Polyp type	Number (n = 414)		Location		Size (mm)		
			Proximal	Distal	0–5	6–10	>10
Serrated polyps							
Goblet cell rich	66 (16)	29%	21 (32)	45 (68)	61 (92)	3 (5)	2 (3)
Microvesicular	54 (13)		14 (26)	40 (74)	42 (78)	12 (22)	0 (0)
SSA	36 (9)		27 (75)	9 (25)	13 (36)	17 (47)	6 (17)
TSA	3 (0.7)		2 (66)	1 (33)	1 (33)	0 (0)	2 (66)
MP	7 (1.7)		4 (57)	3 (43)	3 (43)	2 (29)	2 (29)
Conventional adenomas							
Tubular adenoma	237 (57)	60%	176 (74)	61 (26)	185 (78)	43 (18)	9 (4)
Tubulovillous adenoma	11 (2.7)		6 (55)	5 (45)	0 (0)	5 (45)	6 (55)

NOTE. All values are expressed as n (%).

SSA: donne 65% vs uomini 35% (P<0.5)
42% dei pz storia familiare di cancro colico
il n° medio di polipi "neoplastici" era più alto in pz con almeno 1 AS (5%) rispetto ai pz senza AS (2.5%) (P<0.001)

considerazioni “cliniche”

- Asportare tutti i polipi, anche di piccole dimensioni?
- Asportare i PI “solo” se inseriti nel contesto di una poliposi iperplastica?
- Tecnica di asportarzione (con pinza, “en bloc” per dimensioni >5 mm)?

considerazioni “organizzative”

- Ci deve essere una adeguata strumentazione di base per le colonscopie di screening?
- Nell’ambito della “routine” bisogna considerare, per questi soggetti, tempi di esecuzione più appropriati per una eventuale cromoscopia?
- Si devono individuare centri di riferimento per follow-up più accurati?

The serrated polyp comes of age
Editorials Lauwers JI, Chung DC
Gastroenterology November 2006, vol 131, n°5

- Gli AS probabilmente evolvono verso il cancro in tempi più rapidi (1-2 anni) rispetto agli adenomi classici

  (Jo VS, Semin Oncol 2005; 32:11-23)
- Probabilmente il n. degli AS è sottostimato in quanto difficilmente individuabili alla colonscopia convenzionale
- Relativa alta prevalenza nella popolazione a basso rischio
- > attenzione negli individui ad alto rischio
- E' tuttavia ancora da definire il profilo del soggetto ad "alto rischio"
- **Il follow-up nei soggetti con AS asportati non è ancora standardizzato**

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

CA Cancer J Clin 2006;56;143-159

1. The overall goal of these guidelines is to identify predictors of subsequent advanced adenomas and cancers to stratify patients into lower- and higher-risk groups.
2. These guidelines focus on the above risk stratification to encourage a shift from intense surveillance to surveillance based on risk. This would free up endoscopic resources for screening, diagnosis, and appropriate surveillance.
3. High-quality baseline colonoscopy is emphasized as critical for effectively reducing colon cancer risk.
4. Completeness of polypectomy at baseline is emphasized, particularly in the setting of piecemeal removal of large sessile polyps.
5. Follow-up surveillance of hyperplastic polyps is discouraged, except in the case of hyperplastic polyposis.
6. The importance of increasing awareness of hyperplastic polyposis is discussed.
7. The use of fecal occult blood testing during surveillance is discouraged at present but requires further study.
8. Follow-up intervals after removal of one or two small (<1 cm) adenomas have been lengthened (5 to 10 years or average risk screening options), and within this range, left to the clinician's judgment and the patient's preference.
9. Evolving technologies such as chromoendoscopy, magnification endoscopy, and CT colonography (virtual colonoscopy) are not yet established as surveillance modalities.

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

CA Cancer J Clin 2006;56;143-159

1. **Patients with small rectal hyperplastic polyps** should be considered to have normal colonoscopies, and therefore the interval before the subsequent colonoscopy should be 10 years. An exception is patients with a hyperplastic polyposis syndrome. They are at increased risk for adenomas and colorectal cancer and need to be identified for more intensive follow up.
2. **Patients with only one or two small (<1 cm) tubular adenomas with only low-grade dysplasia** should have their next follow-up colonoscopy in 5 to 10 years. The precise timing within this interval should be based on other clinical factors (such as prior colonoscopy findings, family history, and the preferences of the patient and judgment of the physician).
3. **Patients with 3 to 10 adenomas, or any adenoma ≥ 1 cm, or any adenoma with villous features, or high-grade dysplasia** should have their next follow-up colonoscopy in 3 years providing that piecemeal removal has not been done and the adenoma(s) are completely removed. If the follow-up colonoscopy is normal or shows only one or two small tubular adenomas with low-grade dysplasia, then the interval for the subsequent examination should be 5 years.
4. **Patients who have more than 10 adenomas at one examination** should be examined at a shorter (<3 years) interval established by clinical judgment, and the clinician should consider the possibility of an underlying familial syndrome.
5. **Patients with sessile adenomas that are removed piecemeal** should be considered for follow up at short intervals (2 to 6 months) to verify complete removal. Once complete removal has been established, subsequent surveillance needs to be individualized based on the endoscopist's judgment. Completeness of removal should be based on both endoscopic and pathologic assessments.
6. **More intensive surveillance is indicated when the family history may indicate hereditary nonpolyposis colorectal cancer.**

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

CA Cancer J Clin 2006;56;143-159

Additional Surveillance Considerations

1. The present recommendations assume that colonoscopy is complete to the cecum and that bowel preparation is adequate. A repeat examination should be done if the bowel preparation is not adequate before planning a long-term surveillance program.
2. There is clear evidence that the quality of examinations is highly variable. A continuous quality improvement process is critical to the effective application of colonoscopy in colorectal cancer prevention.
3. A repeat examination is warranted if there is a concern that the polyp is incompletely removed, particularly if it shows high-grade dysplasia.
4. Endoscopists should make clear recommendations to primary care physicians about when the next colonoscopy is indicated.
5. Given the evolving nature of guidelines, it is important that physicians and patients should remain in contact so that surveillance recommendations reflect changes in guidelines.
6. Pending further investigation, performance of fecal occult blood test is discouraged in patients undergoing colonoscopic surveillance.
7. Discontinuation of surveillance colonoscopy should be considered in persons with serious comorbidities with less than 10 years of life expectancy, according to the clinician's judgment.
8. Surveillance guidelines are intended for asymptomatic people. New symptoms may need diagnostic workup.
9. The application of evolving technologies such as chromoendoscopy, magnification endoscopy, narrow-band imaging, and computed tomography colonography are not established for postpolypectomy surveillance at this time.

La polipectomia "piecemeal" di polipi sessili > 1cm può contribuire ad una maggiore incidenza di cancro colo-rettale

Atkin WS,	**N Engl J Med 1992**
Robertson DJ,	**Gastroenterology 2005**
Pabby A,	**Gastrointest Endosc 2005**

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

CA Cancer J Clin 2006;56;143-159

Hyperplastic polyps at risk for such a progression exhibit atypical architectural and cytologic features, are often large and sessile, and are usually proximally located. Other terms for these hyperplastic polyp variants are sessile serrated adenoma or serrated polyp with abnormal proliferation. Some authors have suggested that complete removal and surveillance, as for typical adenomas, may be warranted in these cases.[69,70]

Huang CS, Am J Gastroenterol 2004; Snover D, Am J Clin Pathol 2005