Convegno Nazionale
GISCoR 2015

L'identificazione endoscopica delle lesioni serrate: come e dove

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19 -20 NOVEMBRE 2015
NAPOLI | Hotel Royal Continental

CARCINOGENESI COLORETTALE

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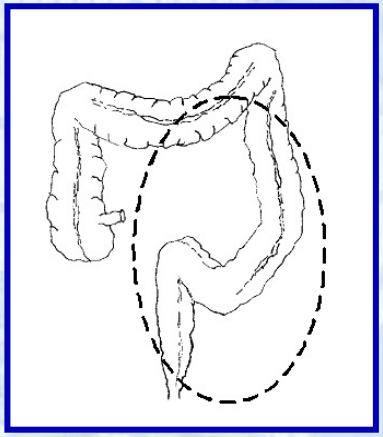
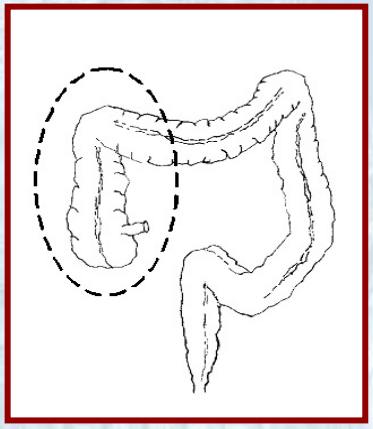
ADENOMA-CARCINOMA = 70%



Instabilità cromosomica (CIN)

Instabilità microsatelliti (MSS)

POLIPO SERRATO-CARCINOMA = 30%

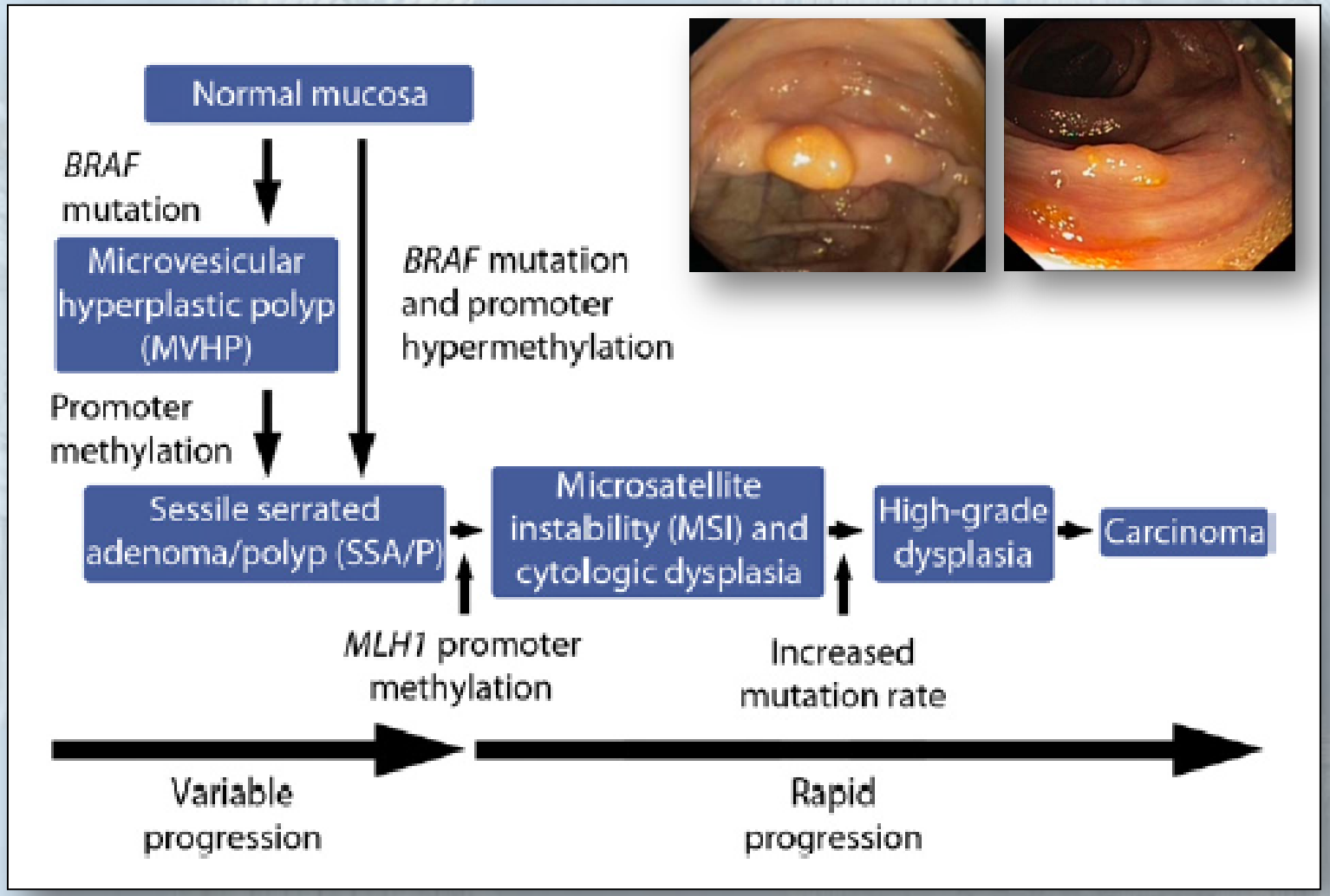


Fenotipo metilante o CIMP

Mutazione BRAF

Bettington M, Histopathology 2013;62:367-86

Serrated pathway



Limketkai BN, Gastrointest Endosc 2013;77:360-75
IJspeert JE, Gastrointest Endosc Clin N Am 2015;25:169-82

CLASSIFICAZIONE WHO delle LESIONI SERRATE

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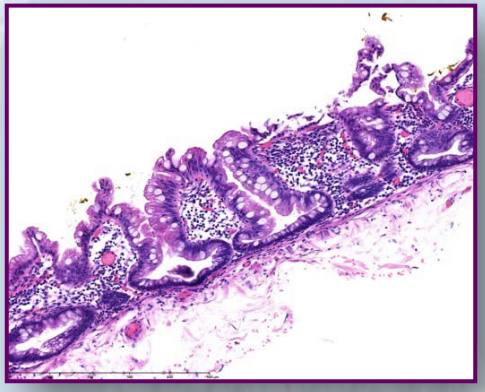
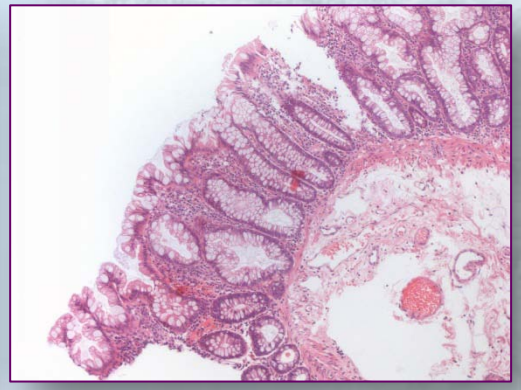
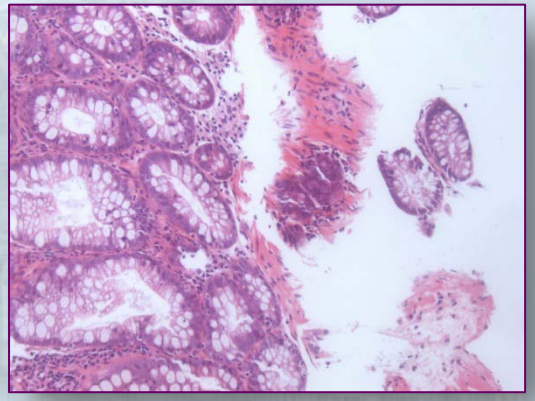
Polipo iperplastico (HP)	microvescicolare (MVHP) goblet-cell rich (GCHP) deplezione di mucina (MPHP)
Polipo/adenoma serrato sessile (SSP/SSA)	senza displasia citologica con displasia citologica
Adenoma serrato tradizionale (TSA)	

Rex DK, Am J Gastroenterol 2012;107:1315-29







L'identificazione endoscopica delle lesioni serrate

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PERCHE'

DOVE

COME

L'identificazione endoscopica delle lesioni serrate

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PERCHE' CERCARLE

Prevalence, Risk Factors, and Outcomes of Interval Colorectal Cancers: A Systematic Review and Meta-Analysis

Singh S, Am J Gastroenterol 2014;109:73-89

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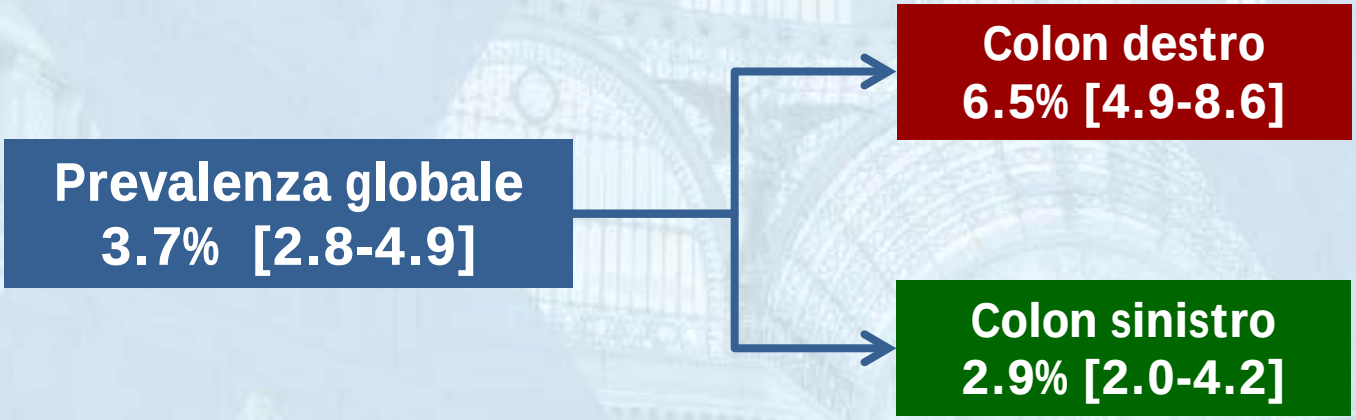
12 studi

7912 cancri intervallari (6-36 mesi post-colonscopia)



Circa 1:27 CCR si sviluppa entro 3 anni da una colonscopia precedente

2.4 volte più probabile al colon destro

No Decrease in the Rate of Early or Missed Colorectal Cancers After Colonoscopy With Polypectomy Over a 10-Year Period: A Population-Based Analysis

Pullens HJ, Clin Gastroenterol Hepatol 2015;13:140-7

Studi di popolazione caso-controllo

CCR "missed" = **1.7%** nel 1996 vs. **2.3%** nel 2006 (p=0.012)

Fattori di rischio indipendente:

Localizzazione al colon destro (OR 2.34, CI 1.8-3.05)

Sesso maschile (OR 1.31, CI 1.06-1.62)

SSA/P with dysplasia: a triple threat for interval cancer

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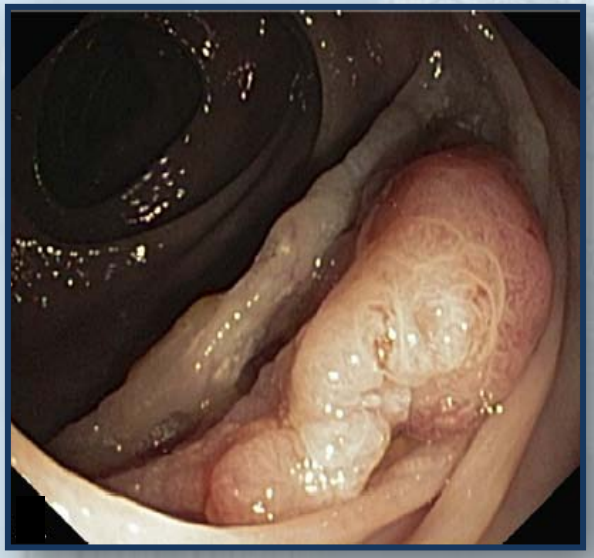
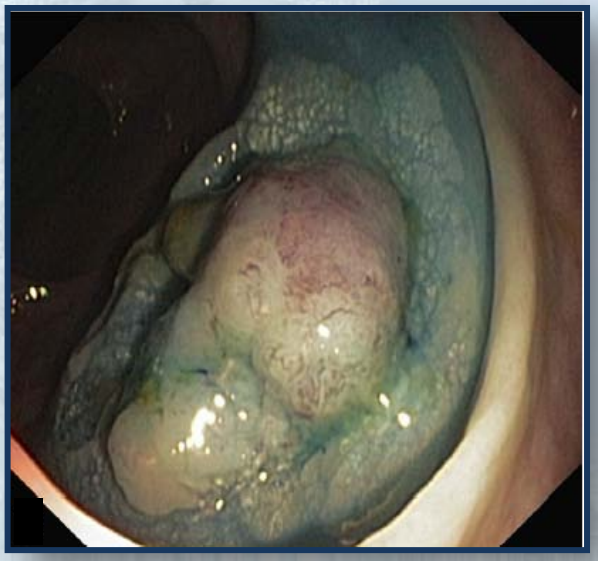
1. **Rapidly progressive**
2. **Evades detection** (dysplasia can mimic conventional adenoma)
3. **High risk of incomplete resection**





Burgess NG, Gastrointest Endosc 2014;80:307-10

Endoscopic characterization of SSA with dysplasia

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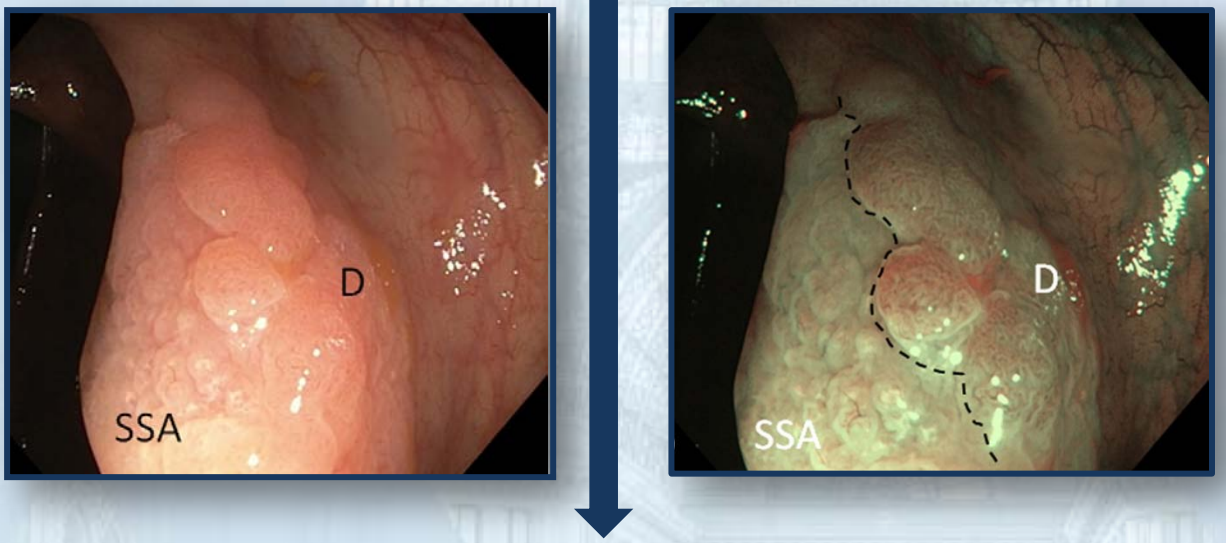
Zone of transition within the lesion to an altered surface morphology with a different pit and vascular pattern



- **prioritization of these lesions for resection**
- **selection of an enhanced resection technique (EMR)**
- **opportunity to alert the pathologist**

Burgess NG, Gastrointest Endosc 2014;80:307-10

L'identificazione endoscopica delle lesioni serrate

DOVE CERCARLE

COME CERCARLE

QUALITY INDICATORS FOR
GI ENDOSCOPIC PROCEDURES

Quality indicators for colonoscopy

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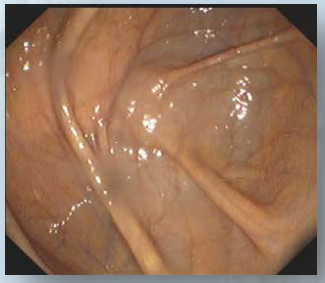
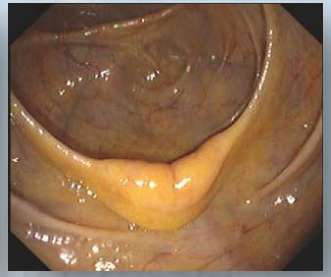
Preparazione intestinale adeguata (split > 90%)
Ispezione lenta e meticolosa dell'intero colon (CIR > 95% e WT > 6-8 min)
Capacità di riconoscere l'intero spettro di lesioni precancerose (SERRATI)
Elevata capacità di identificare lesioni (ADR >25% nei maschi e >20% nelle femmine)
Tecnica di resezione endoscopica efficace e sicura
Rispetto degli intervalli di sorveglianza post-polipectomia





Rex DK, Gastrointest Endosc 2015; 81:31-53

Contents lists available at ScienceDirect

Digestive and Liver Disease

journal homepage: www.elsevier.com/locate/dld

Oncology

Prevalence and characteristics of serrated lesions of the colorectum in Italy: A multicentre prospective cohort study

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Prevalenza lesioni serrate in Italia: 6%

Predittori clinici ed endoscopici indipendenti:

- **Età**
- **Colonscopia di sorveglianza**
- **Localizzazione al colon destro**
- **Morfologia non polipoide**
- **Dimensioni > 10 mm**

Rotondano G, Dig Liver Dis 2015;47:512-17

Caratteristiche endoscopiche delle lesioni serrate

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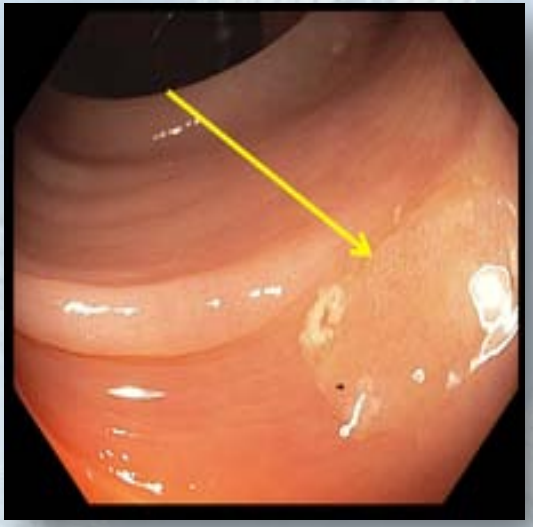

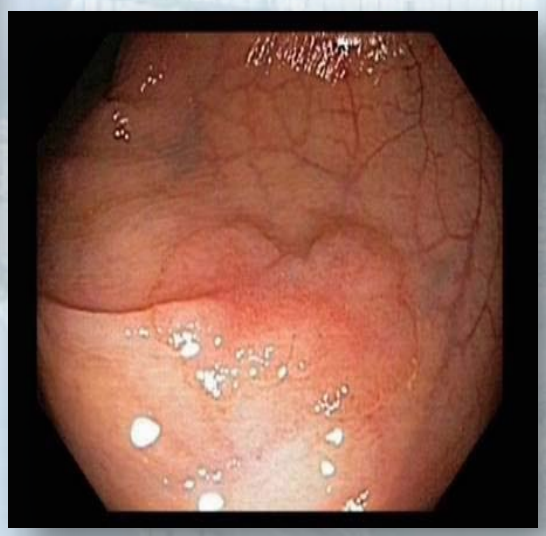

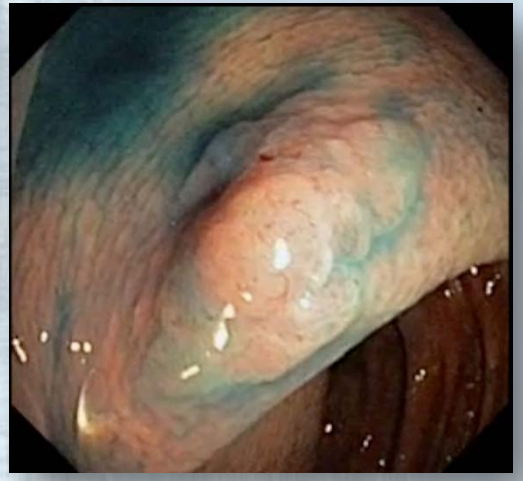

- Cappuccio di muco
- Margini sfumati
- Superficie irregolare
- Aspetto «a nuvola»
- Spot brunastri

Hazewinkel Y, Gastrointest Endosc 2013;77:916-24
Vleugels JL, Best Pract Res Clin Gastroenterol 2015;29:675-86

A Novel Pit Pattern Identifies the Precursor of Colorectal Cancer Derived From Sessile Serrated Adenoma

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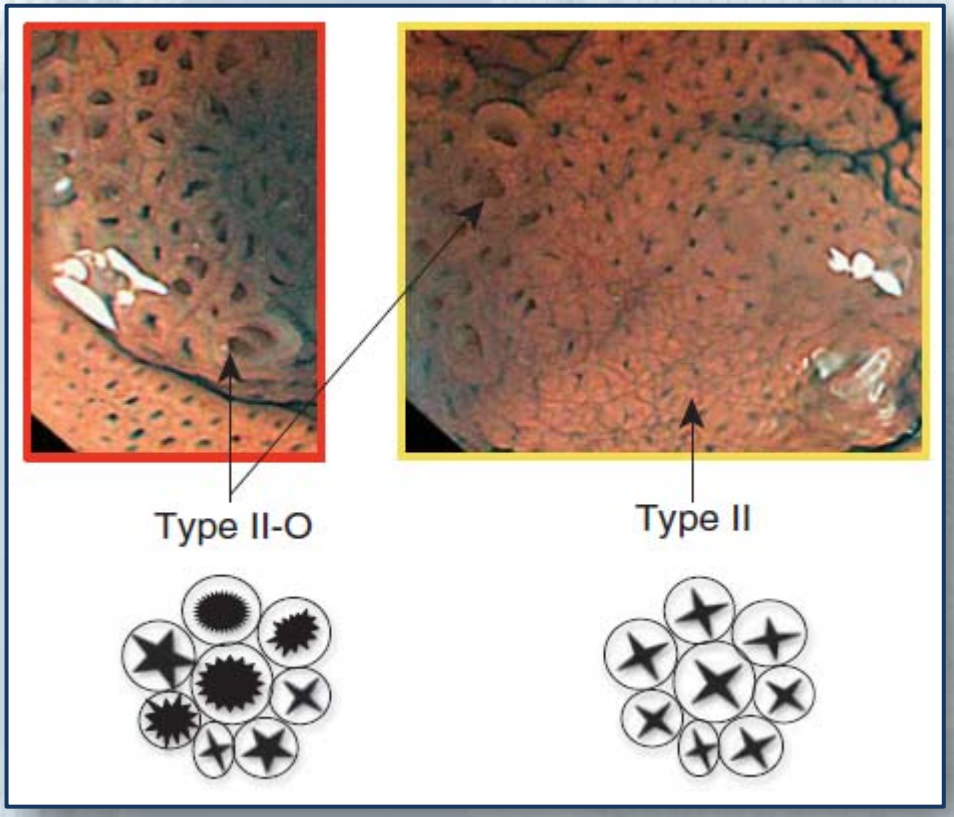

Kimura T, Am J Gastroenterol 2012;107:460-9

WASP classification for endoscopic differentiation of small and diminutive adenomas, hyperplastic polyps and SSA/Ps

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Brown color?	No
Brown vessels?	No
Oval tubular or branched surface pattern?	No

↓

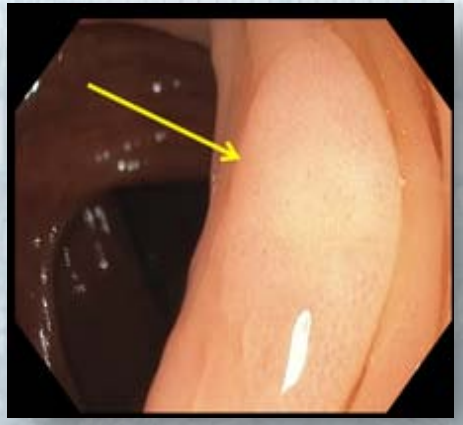
Type 1 polyp

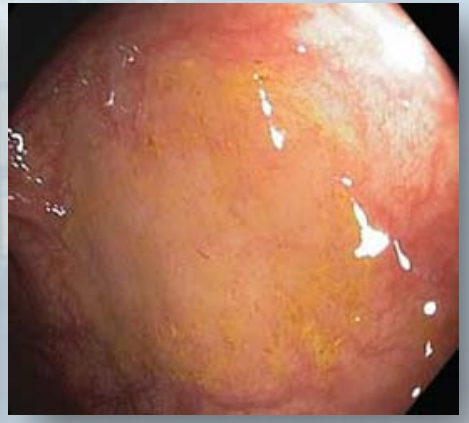
↓

Clouded surface?	Yes
Indistinctive (vague) border?	No
Irregular shape?	Yes
Dark spots inside crypts?	Yes

↓

Sessile serrated adenoma/polyp





	Accuracy diminutive lesions	acy small lesions
Overall analysis	0.74 (0.69 to 0.79)	).75 to 0.88)
With high confidence	0.83 (0.79 to 0.88)	).80 to 0.93)
SSA/P versus non-SSA/P	0.86 (0.82 to 0.90)	).83 to 0.94)
With high confidence	0.91 (0.87 to 0.94)	).85 to 0.96)

Dutch Workgroup serrAted polypS & Polyposis (WASP)
IJspeert JE, Gut 2015;0:1-8. doi:10.1136

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SERRATED LESIONS: RESECT AND DISCARD?

All serrated lesions, including SSAs and hyperplastic polyps, proximal to the sigmoid colon, and all serrated lesions in the rectosigmoid larger than 5 mm ➔ complete removal

SSA ➔ surveillance interval as if the polyp were adenomatous

- 1 or-2 SSA < 10 mm ➔ 5 years
- any SSA >10 mm ➔ 3 years

Rex DK, Am J Gastroenterol 2012;107:1315-29

Rischio di sviluppare CCR attraverso il pathway serrato

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Rex DK, Am J Gastroenterol 2012;107:1315-29

Adenoma serrato sessile: caratteri endoscopici

Location	Preferentially located in the proximal colon
Size	Generally larger than 10 mm
Shape	Flat O-IIa[a] or O-IIb[a]
	Sessile O-Is[a]
Edges	Hardly distinguishable using white light endoscopy
	Lateral borders identified using chromoendoscopy
Colour	Similar to surrounding colonic mucosa
	Often covered by stools or bile salts giving a yellow or green "mucus cap"
Pit patterns	Type II-O +++
	Type III-SA and IV-SA

O, open shape; SA, serrated adenoma.

[a] Following the Paris classification.

L'identificazione endoscopica delle lesioni serrate

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PERCHE' → **Importanti precursori del CCR**

DOVE → **Prevalentemente a destra**

COME →
- **Pulizia adeguata**
- **Ispezione meticolosa**
- **Strumenti HD**
- **Cromoendoscopia**

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Grazie dell'attenzione

WASP classification

Dutch Workgroup serrAted polypS & Polyposis (WASP)

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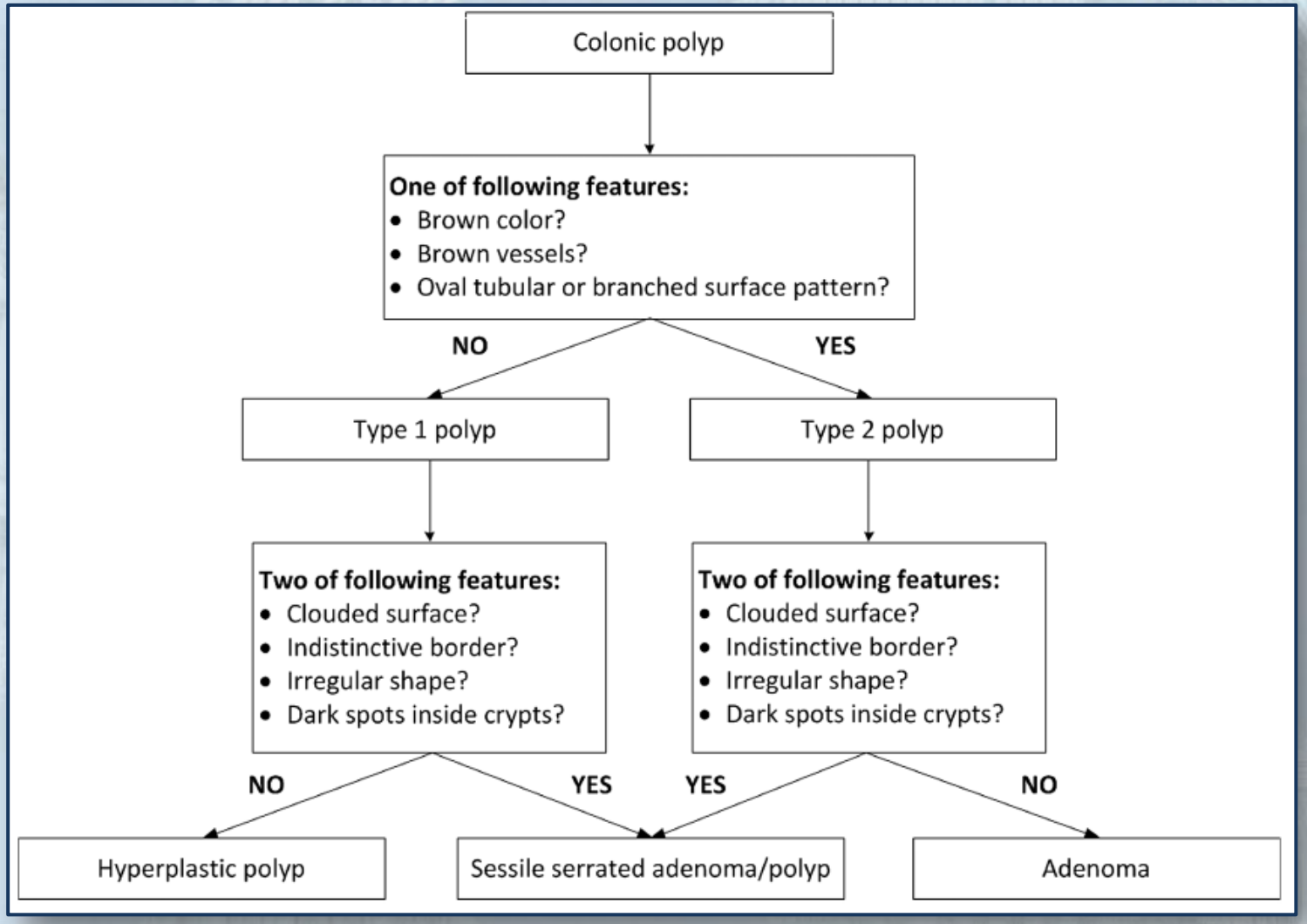
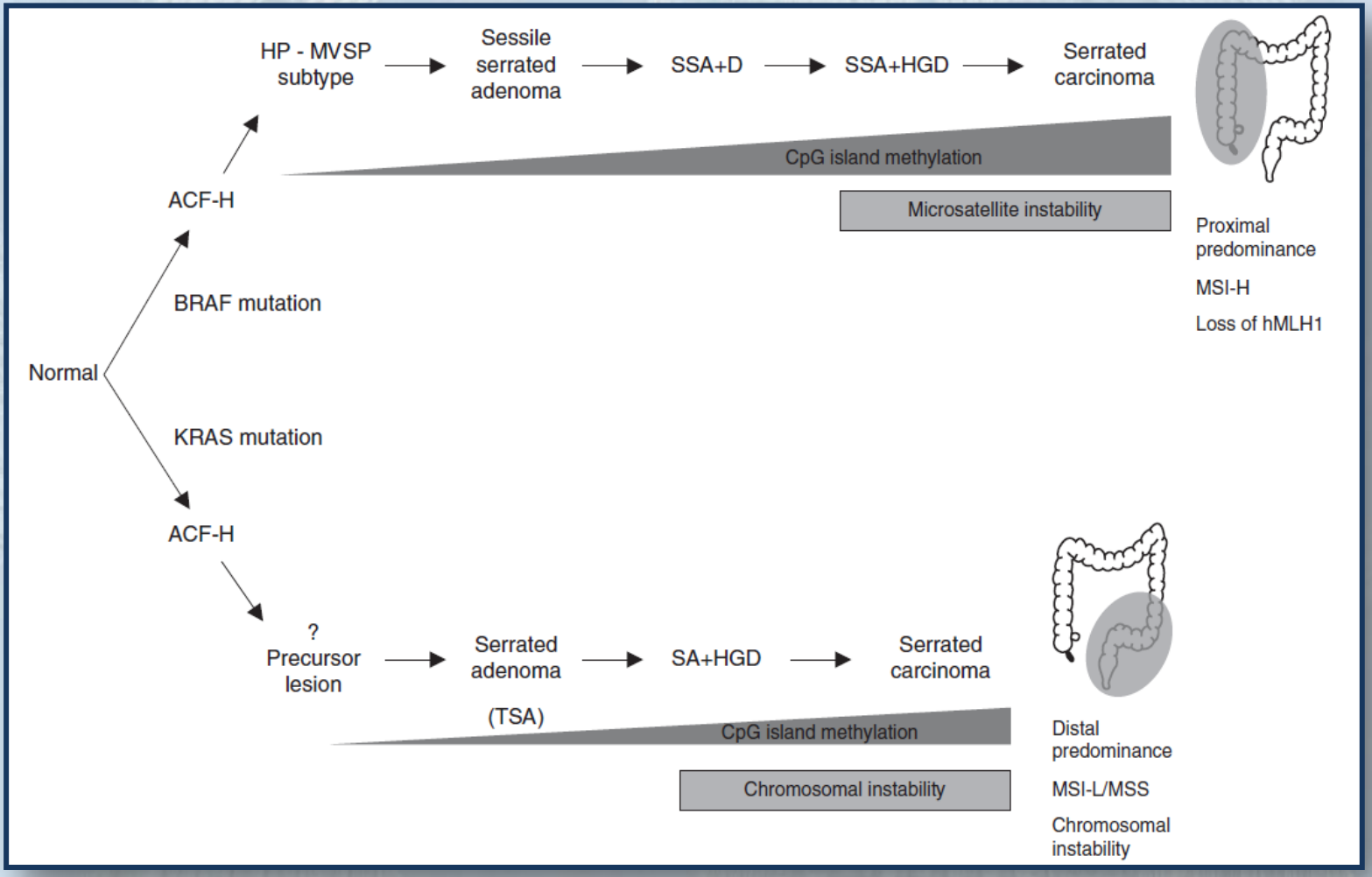


IJspeert JE, Gut 2015;0:1-8. doi:10.1136

THE SERRATED PATHWAY



Huang CS, Am J Gastroenterol 2011;106:229-40

Serrated pathway

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Normal

Promoter methylation (CpG island)
BRAF mutation

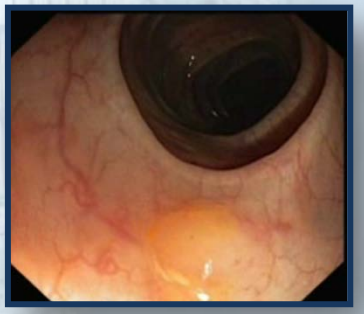
Hyperplastic polyp (MVHP)

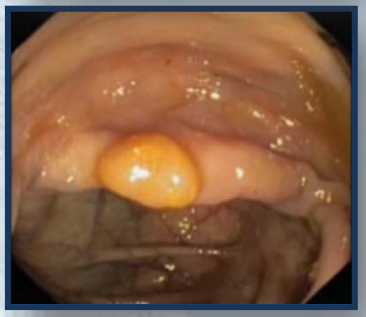
CIMP high: silenced gene promoters, including tumor suppressor genes

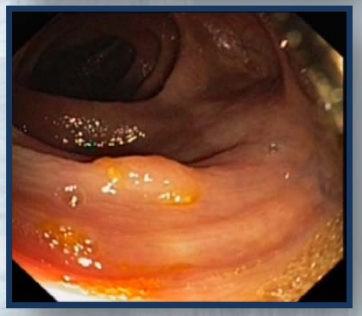
Serrated adenomas
Proximal; flat; women > men

MLH1 silencing
Dysplasia

Serrated adenocarcinoma
DNA microsatellite instability







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With high confidence	0.83 (0.79 to 0.88)	0.86 (0.80 to 0.93)
SSA/P versus non-SSA/P	0.86 (0.82 to 0.90)	0.88 (0.83 to 0.94)
With high confidence	0.91 (0.87 to 0.94)	0.91 (0.85 to 0.96)
AD versus non-AD	0.81 (0.77 to 0.85)	0.89 (0.84 to 0.94)
With high confidence	0.88 (0.84 to 0.92)	0.93 (0.89 to 0.98)
Neoplastic lesions versus HP	0.81 (0.77 to 0.85)	0.85 (0.80 to 0.92)
With high confidence	0.88 (0.84 to 0.92)	0.90 (0.84 to 0.95)

IJspeert JE, Gut 2015;0:1-8. doi:10.1136