

COLORECTAL CANCER

THE RISK LEVELS

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QUALITY IN ENDOSCOPY

COLONOSCOPY &
COLONIC NEOPLASMS

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COLORECTAL CANCER

The RISK LEVELS

AVERAGE RISK

HIGH RISK

VERY HIGH RISK

FIRST GROUP

persons at average risk of colorectal cancer

Definition = Sporadic cases

Men and women over 50
with no personal or family history of colorectal
cancers or adenomas

Colorectal cancer is indeed very rare before age 40. The risk increases after age 50. The average age at diagnosis is 70 years.

FIRST GROUP

persons at average risk of colorectal cancer

Definition = Sporadic cases

Men and women over 50
with no personal or family history of colorectal
cancers or adenomas

This group represent 65-85% of cases

FIRST GROUP

persons at average risk of colorectal cancer

Monitoring

Within an organized mass screening programme (nation or region-based).

In Europe, mass screening is mainly based on guaiac or immunochemical FOBT. First-line colonoscopy or rectosigmoidoscopy are used or evaluated in some countries (such as Poland or Germany for colonoscopy, UK or Italy for rectosigmoidoscopy)

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SECOND GROUP:

persons at high risk for colorectal cancer

Definition = non syndromic familial cases, IBD

The risk is 2-5 times higher than for the average risk-population.

These cases represent 10-30% of colorectal cancer cases.

SECOND GROUP:

persons at high risk for colorectal cancer

The risk increases with

- the number of relatives with CRC
- the closer the relatives are to the patient,
- and the age of CRC in family members.

Individuals with a personal history of colorectal cancer or adenoma are also at high risk for subsequent development of cancer.

| Familial risk | RR | 95 % CI |
|--|------|--------------|
| One first-degree relative with CRC | 2.25 | 2.00 to 2.53 |
| < 45 y | 3.87 | 2.40 to 6.22 |
| 45-59 y | 2.25 | 1.85 to 2.72 |
| > 59 y | 1.82 | 1.47 to 2.25 |
| Two or more first-degree relatives with CRC | 4.25 | 3.01 to 6.02 |
| Only two first-degree relatives | 3.76 | 2.56 to 5.51 |
| One second or third-degree relative with CRC | | 1.50 |
| Two second-degree relatives with CRC | | 2.30 |
| One first-degree relative with an adenoma < 60 y | 1.99 | 1.55 to 2.55 |

RR, relative risk; CI, confidence intervals

Burt RW (Gastroenterol Clin North Am 1996;25:793-803), Johns LE, Houlston RS (Am J Gastroenterol 2001;96:2992-3003), European guidelines for quality insurance in colorectal cancer screening and diagnosis, IARC first edition.

SECOND GROUP: persons at high risk for colorectal cancer

Patients with chronic inflammatory bowel disease (ulcerative colitis, Crohn's disease) are also at increased risk.

Risk factors include

- long duration (evolving for over 10 years)
- extent of the disease,
- young age at onset,
- complicating sclerosing cholangitis.

Risk of colorectal cancer in IBD patients is 10 to 25% over the life.

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AVERAGE RISK

HIGH RISK

VERY HIGH RISK

THIRD GROUP

persons at very high risk of colorectal cancer
(syndromic familial risk)

These cases represent 1-5% (mean 3%) of the
colorectal cancer cases.

One-third of new cases are caused by a de novo
mutation. Nearly one out of two will be diagnosed with
colorectal cancer in these families.

Familial adenomatous polyposis (FAP).

FAP is autosomal-dominant.

The risk of getting cancer is almost systematic if no preventive treatment is provided.

*Hereditary nonpolyposis colorectal cancer (HNPCC)
or Lynch syndrome.*

HNPCC is autosomal-dominant

Most common form of syndromic familial colorectal cancer (up to 5% of the total cases of colorectal cancer) A consensus group has established a list of criteria (the Amsterdam II criteria) that suggest the presence of the HNPCC phenotype.

THIRD GROUP

persons at very high risk of colorectal cancer
(syndromic familial risk)

Other less common familial syndromes are: juvenile polyposis, Peutz–Jeghers syndrome, Cowden syndrome

Monitoring:

- oncogenetic consultation
- search for mutations
- regular chromocoloscopies

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The RISK LEVELS

*AVERAGE RISK: mass screening
(colonoscopy or FOBT or rectoS)*

HIGH RISK: colonoscopy

*VERY HIGH RISK: oncogenetic consultation,
search for mutations
chromocolonoscopy*