

Prevention and early detection of Colorectal Cancer (CRC) in asymptomatic patients

Patients registering in general practice or questioned opportunistically as part of a clinical interview should have details of their past medical history and family history recorded to ensure appropriate referral via the local colorectal service for assessment and genetic advice if needed.

First degree relative (FDR = siblings, parent, child)

Second degree relative (SDR = aunt, uncle, grandparent, nephew, niece)

Age = age at diagnosis

Risk stratification related to estimated lifetime incidence risk

Background lifetime risk	1:30	(1:50 risk of death)
One FDR >60 yrs.	1:17	
One FDR 45 – 60 yrs.	unknown	
One FDR and one SDR	1:12	
One FDR age <45 yrs.	1:10	REFER FOR ASSESSMENT
Both parents any age	1:8.5	REFER FOR ASSESSMENT
Two FDRs	1:6	REFER FOR ASSESSMENT
Three FDRs	1:2	REFER FOR ASSESSMENT

For those with risk higher or equal to 1:10, referral to specialist services for screening should be made. There are guidelines on the management of high-risk groups available (BSG 2002). In cases where there is doubt, referral for advice to either the local genetics services or to the local colorectal specialist should be considered.

Average risk (1:17 - 1:50)

Commonly : One FDR with CRC > 45 yrs. at diagnosis or
An SDR with CRC.

Screening not indicated. Provide general advice on risk lowering measures (see over).

Increased risk (1:10 – 1:17)

There is no direct evidence for using aggressive screening methods. Emphasise advice on risk-lowering measures and early symptoms (see over).

High Risk (1:10 or higher)

Genetic inheritance more likely.

Obtain as detailed a family history as possible of all cancers and refer for genetic assessment and screening. e.g. for an individual with 2 affected first degree relatives any age, screening would be offered at age 50 or at least 5 years younger than youngest affected relative.

Familial Adenomatous Polyposis (FAP) and Hereditary Non-Polyposis Colorectal Cancer (HNPCC) are autosomal dominant conditions in which there is a strong family history of CRC (and sometimes other cancers), usually in three generations. Referral via genetic services is advised since screening guidelines are complex (Gut 2002).

Studies have shown that risk may be lower in people who:

- Stop smoking – 20% of CRC in men attributable to smoking (B)
- Reduce dietary fat and meat (B)
- Increase dietary fruit and vegetables (B)
- Drink only minimal alcohol (0-15 units per week) (B)
- Have any adenomatous polyps removed (B)
- Take regular aspirin if not contraindicated in dosages of 75 -150 mg/day if CHD risk is above 1% per year) (B)
- Reduce salt intake (C)
- Take calcium supplements (1.25 – 2g / day) (C)
- Increase physical activity – at least 3 X 20 minutes vigorous activity per week (C)
- Take vitamins :
 - Folic acid (>400mcg / day) (especially if their alcohol intake is high) (C)
 - Vitamins D & E – in multivitamins (C)
- Take regular probiotics (C)
- Avoid excessive peanut intake (C)

Strength of recommendation

- A** (evidence from randomised controlled trials)
B (evidence from other controlled or quasi-experimental studies)
C (evidence from descriptive studies)
D (expert opinion or clinical experience of respected authorities)

Early symptoms

Symptoms which would require urgent (2 week) referral include rectal bleeding for more than 6 weeks associated with a change in bowel habit (COBH) or right sided abdominal mass, or rectal mass – all at any age, OR persistent rectal bleeding without anal symptoms, unexplained iron deficiency anaemia, or 6 week COBH to looser stools without rectal bleeding – if over 60 years. Full details on page 22 of '2 week referral' guidelines –see below.

Key references and sources of information

- *Gut 2002 51 (Suppl 5): v1-v2* Guidelines for Colorectal Cancer Screening in High Risk Groups <http://gut.bmjournals.com>
- *Improving Outcomes in Colorectal Cancer* (Manual & Research Evidence) NHSE DoH 1997 www.doh.gov.uk/cancer/colorectal.htm
- *'The Early Detection of Colorectal Cancer in Primary care : Guidance for GPs and Health Authorities'* - Report of a South Thames Working Group endorsed by the Primary Care Society for Gastroenterology 1998 www.pcsq.org.uk
- *Cancerline UK* www.cancerlineuk.com
- *Colon Cancer Concern* www.coloncancer.org.uk
- *National Cancer Institute Cancernet* www.cancernet.nci.nih.gov/pdq/pdq_treatment.shtml
- *2 week referral guidelines* www.doh.gov.uk/pub/docs/doh/guidelines.pdf
- *Patient Experience (DIPEX)* www.dipex.org/diptest.dll/EXEC
- *Gastroenterology 2003;124:544-60 Updated Screening Guidelines*