Bowel Cancer

Nursing Workshop

Rotorua June 2012

Mr Rowan Collinson FRACS

Colorectal and General Surgeon

Auckland

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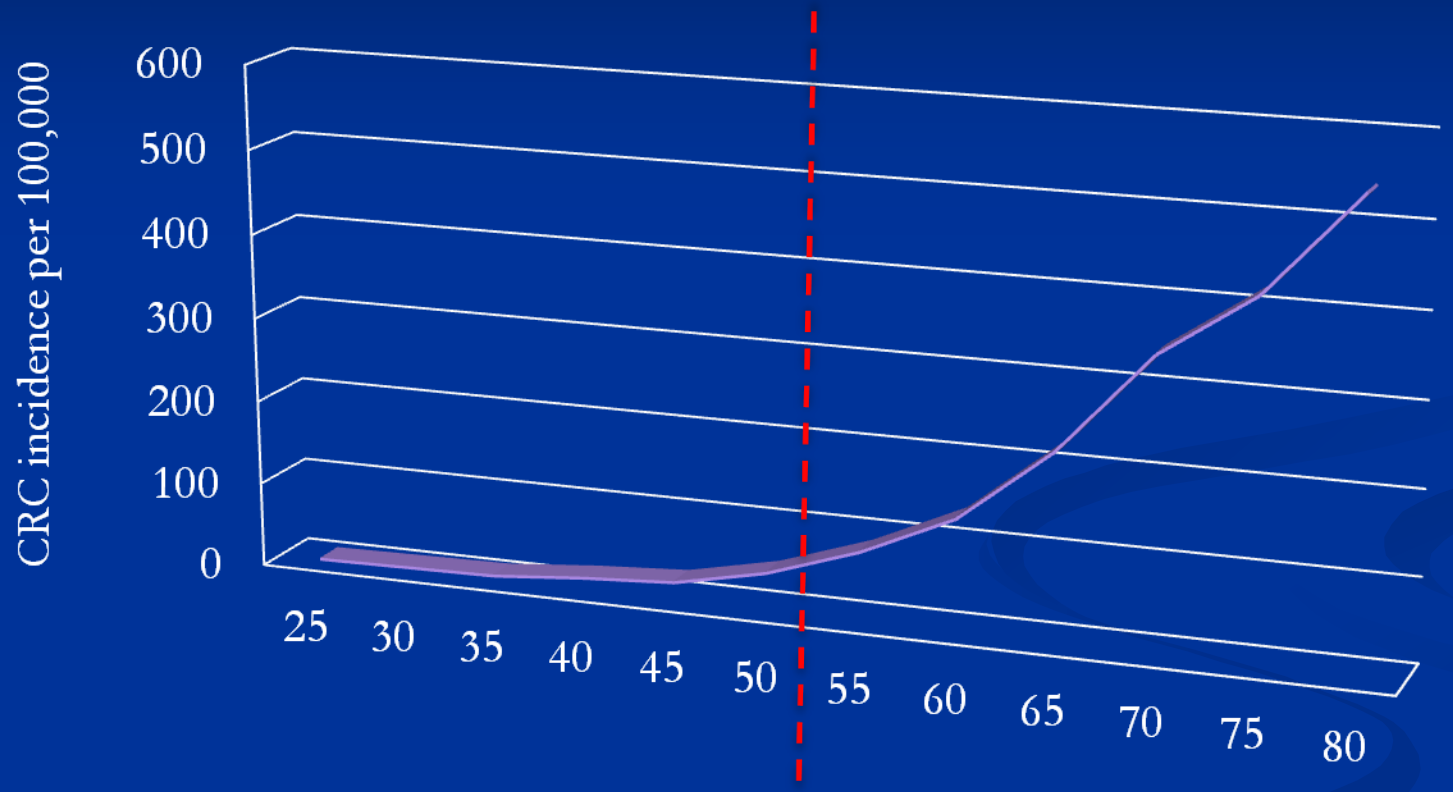
- In 2008 in NZ, CRC was
  - second most common cancer registered
  - second most common cause of death from cancer
- NZ has a low rate of early stage diagnosis of CRC and surgically-curable localised disease.
  - 20% of disease at diagnosis in NZ is metastatic.
- Ethnic differences
  - Maori have a lower incidence of CRC
  - Maori have a higher mortality rate from CRC
- Lifetime risk to age 75yrs is around 6% (1:16)

Age-specific incidence of CRC per 100,000



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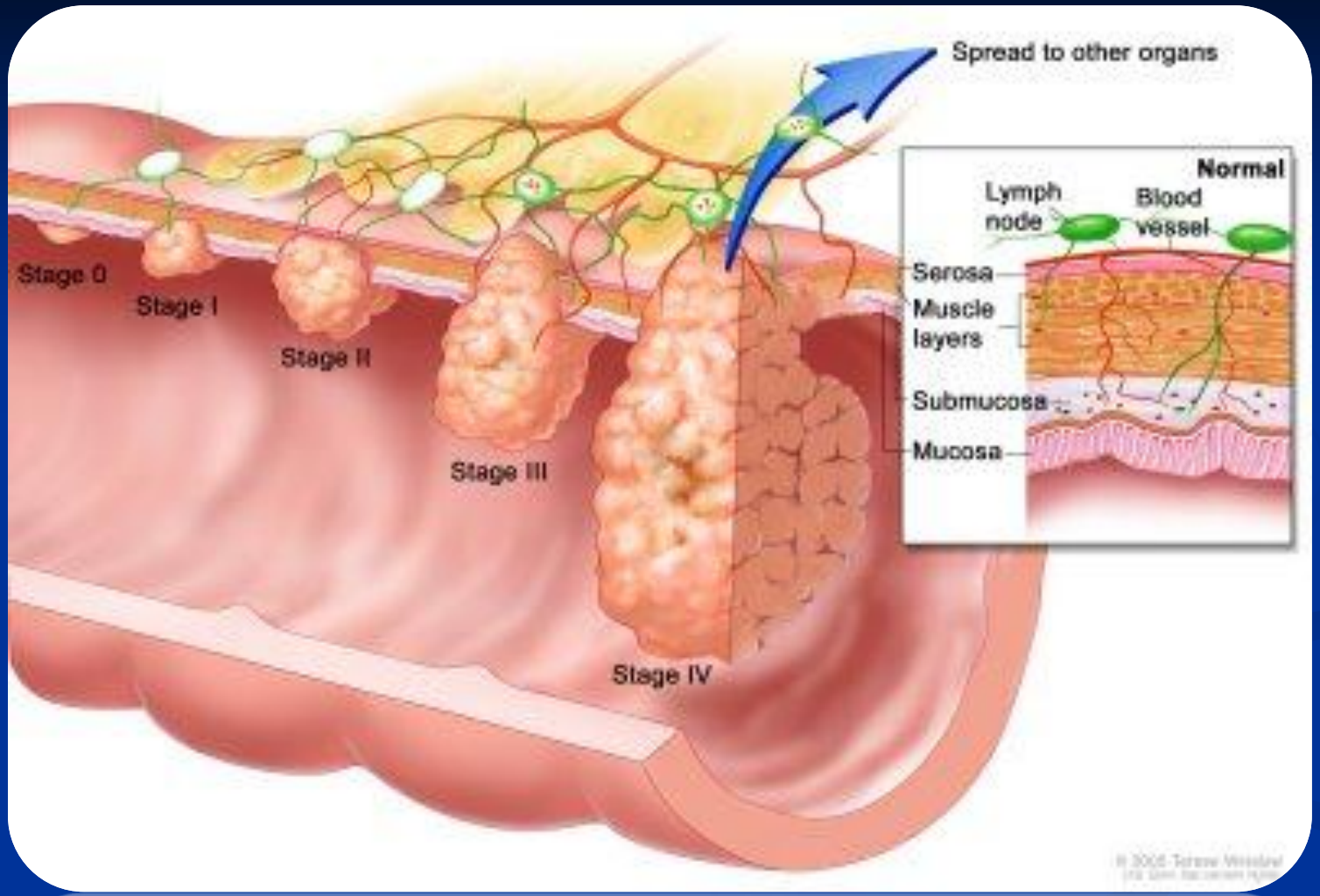

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Box 5.2	Key risk factors for colorectal cancer

- Personal history of colorectal cancer, colorectal adenomas or longstanding extensive ulcerative colitis[i]
- Family history of familial adenomatous polyposis (FAP), hereditary non-polyposis colorectal cancer (HNPCC) or other familial colorectal cancer syndromes[i]
- Inactive lifestyle[ii]
- Obesity[ii]
- Alcohol[ii]
- Smoking[ii]

Sources:

i New Zealand Guidelines Group. Surveillance and management of groups at increased risk of colorectal cancer. Wellington: NZGG; 2004.

ii Australian Cancer Network Colorectal Cancer Guidelines Revision Committee. Guidelines for the prevention, early detection and management of colorectal cancer. Sydney: The Cancer Council Australia and Australian Cancer Network; 2005.

Guideline — Physical activity and obesity

Engage in moderate to vigorous physical activity for 30–60 minutes/day, and avoid excessive weight gain.

Weight should be maintained in the healthy weight range of BMI

Guideline — Tobacco smoking

Avoid tobacco smoking

Guideline — Energy Intake

Limit energy intake in most men to <2500 calories (10,480 kJ) per day and in most women to <2000 calories (8360 kJ) per day.

Guideline — Alcohol

Alcohol consumption should be limited or avoided. For people who do drink alcohol, recommended amounts for men are no more than 2 standard drinks per day and for women no more than one standard drink a day.

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Should dietary fat be restricted to reduce Colorectal Cancer risk?

Guideline — Dietary fat	Practice recommendation		Refs
Reduce dietary fat to <25% of calories as fat.	Cancer	Adenoma	29,30,36-38,40,42, 43
	Recommend		

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Should dietary fat be restricted to reduce Colorectal Cancer risk?

Guideline — Dietary fat	Practice recommendation		Refs
Reduce dietary fat to <25			

Should cereal fibre be selected to reduce Colorectal Cancer risk?

Guideline — Cereal fibre	Practice recommendation		Refs
Select poorly soluble cereal fibres (e.g. wheat bran), especially if at increased risk of Colorectal Cancer.	Cancer	Adenoma	9, 41, 51, 73-76
	Equivocal	Equivocal	

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Should dietary fat be restricted to reduce Colorectal Cancer risk?

Guideline — Dietary fat	Practice recommendation		Refs
Reduce dietary fat to <25	Cancer	Adenoma	28,30,34

Should cereal fibre be selected to reduce Colorectal Cancer risk?

Guideline — Cereal fibre	Practice recommendation		Refs
Select poorly soluble cereal fibr bran), esp increased Cancer.	Cancer	Adenoma	

Should fresh fruit and vegetable intake be increased to reduce Colorectal Cancer risk?

Guideline — Fresh vegetables	Practice recommendation		Refs
Eat five or more serves per day of a variety of vegetables. National nutrition guidelines also advise two serves of fruit daily ("Go for 2 and 5")	Cancer	Adenoma	32, 36, 41, 43, 63, 64, 68
	Equivocal	-	

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Should fresh fruit and vegetable intake be increased to reduce Colorectal Cancer risk?

Guideline — Fresh vegetables	Practice recommendation	Refs
Eat fiv day o veget nutriti advise daily		

Should red meat intake be altered to reduce colon cancer risk?

Guideline — Meat	Practice recommendation		Refs
Moderate intakes of lean red meat can be eaten as part of a mixed diet including carbohydrates (breads and cereals), vegetables and fruit, and dairy products. Charring of red meat is best avoided. Consumption of processed meats should be limited.	Cancer	Adenoma	9,29, 36, 41, 49, 50
	Equivocal	Equivocal	

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Presentation

Table 2. Frequency and Duration of the Symptoms and Signs of Colorectal Cancer (N = 194)

Variable	No.	(%)	Median Duration, Wk (25–75%)*
Fecal occult blood test positive	149	(77)	2 (1–7)
Rectal bleeding	113	(58)	8 (3–19)
Anemia†	110	(57)	2 (1–5)
Abdominal pain	100	(52)	8 (3–20)
Weight loss	76	(39)	27 (9–42)
Anorexia	53	(27)	9 (4–24)
Constipation	53	(27)	10 (3–20)
Altered stools	48	(25)	9 (4–19)
Fatigue	49	(25)	14 (5–27)
Diarrhea	43	(22)	5 (3–15)
Nausea or vomiting	42	(22)	2 (1–5)
Tenesmus	16	(8)	5 (4–21)
Mucus in stools	12	(6)	12 (6–28)
Rectal pain	10	(5)	14 (10–22)
Obstruction	7	(4)	1 (1–4)

* Interquartile range.
† Anemia: a homoglobin of <13.4 g/dl (male) and <12.3 g/dl (female).

Majumdar *et al.* AJG - Vol. 94, No. 10, 1999

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Investigation

- History/exam
- Rigid sigmoidoscopy
- Blood tests
- Colonic imaging
  - Colonoscopy
  - CT colonography

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FBC
Iron studies
LFTs
CEA

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Investigation

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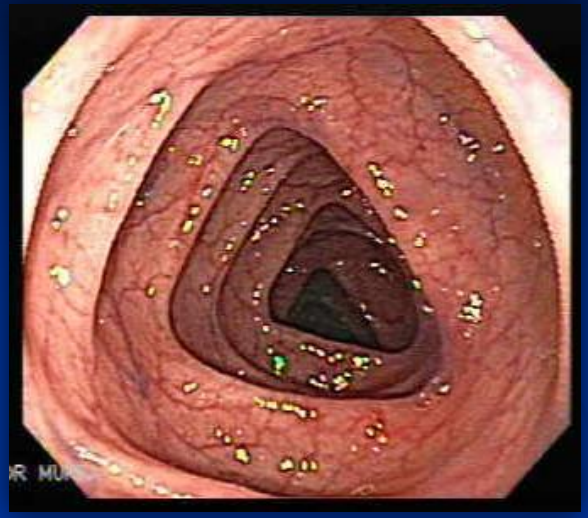

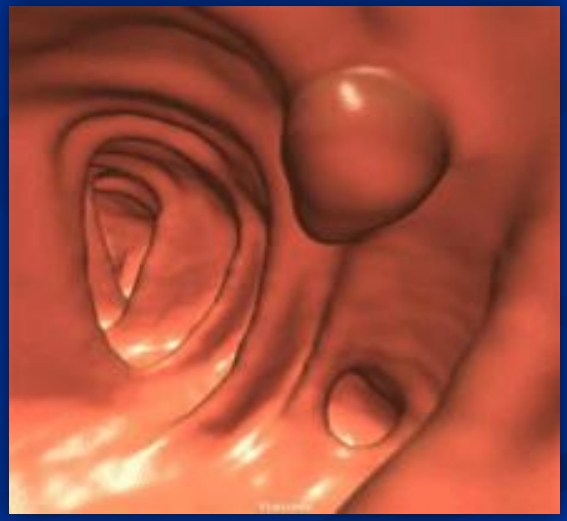

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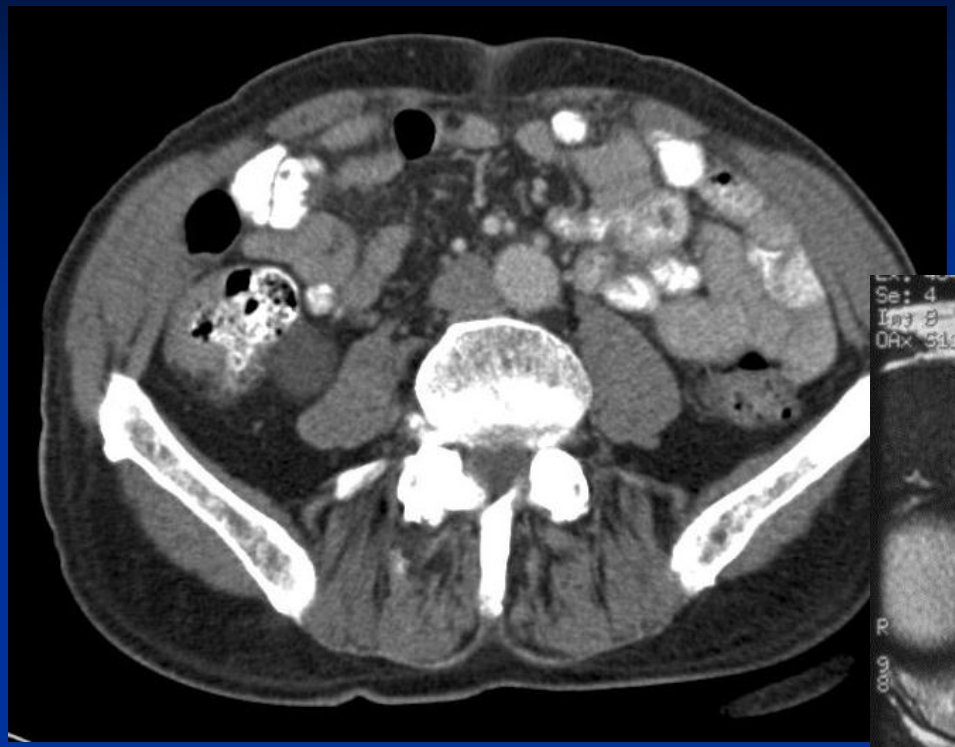
Staging

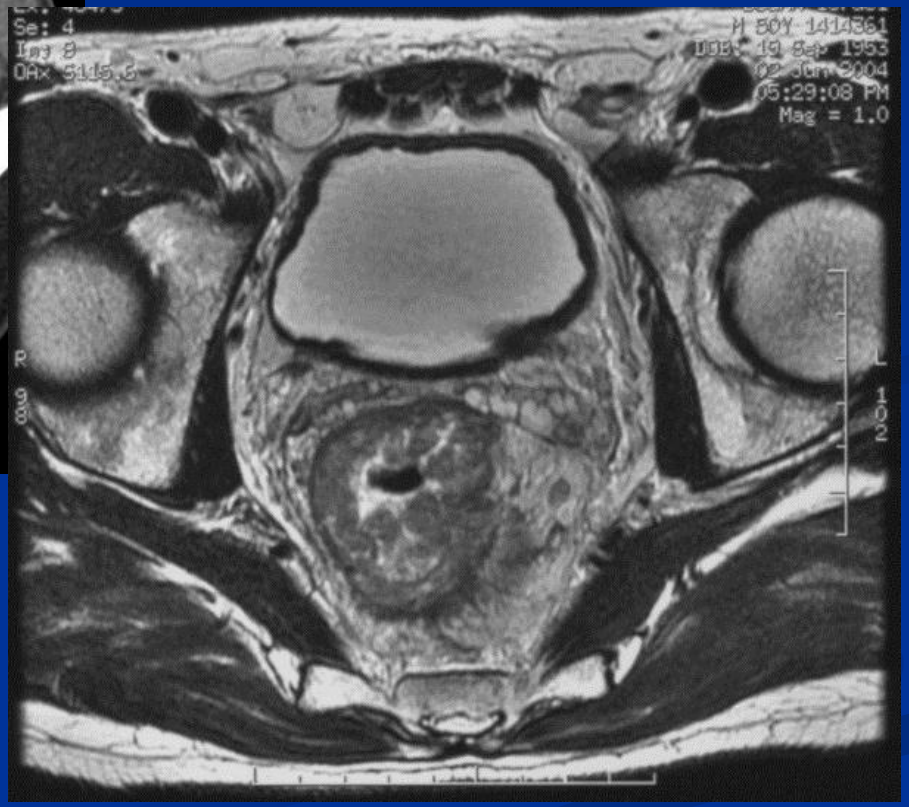
- Demonstrates metastatic disease
- Demonstrates local disease requiring preoperative treatment
  - Rectal cancer
- Guides operative approach
- *All* cancer patients are discussed individually at a multidisciplinary team meeting

Staging



CT Scan

MRI Scan



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Operation

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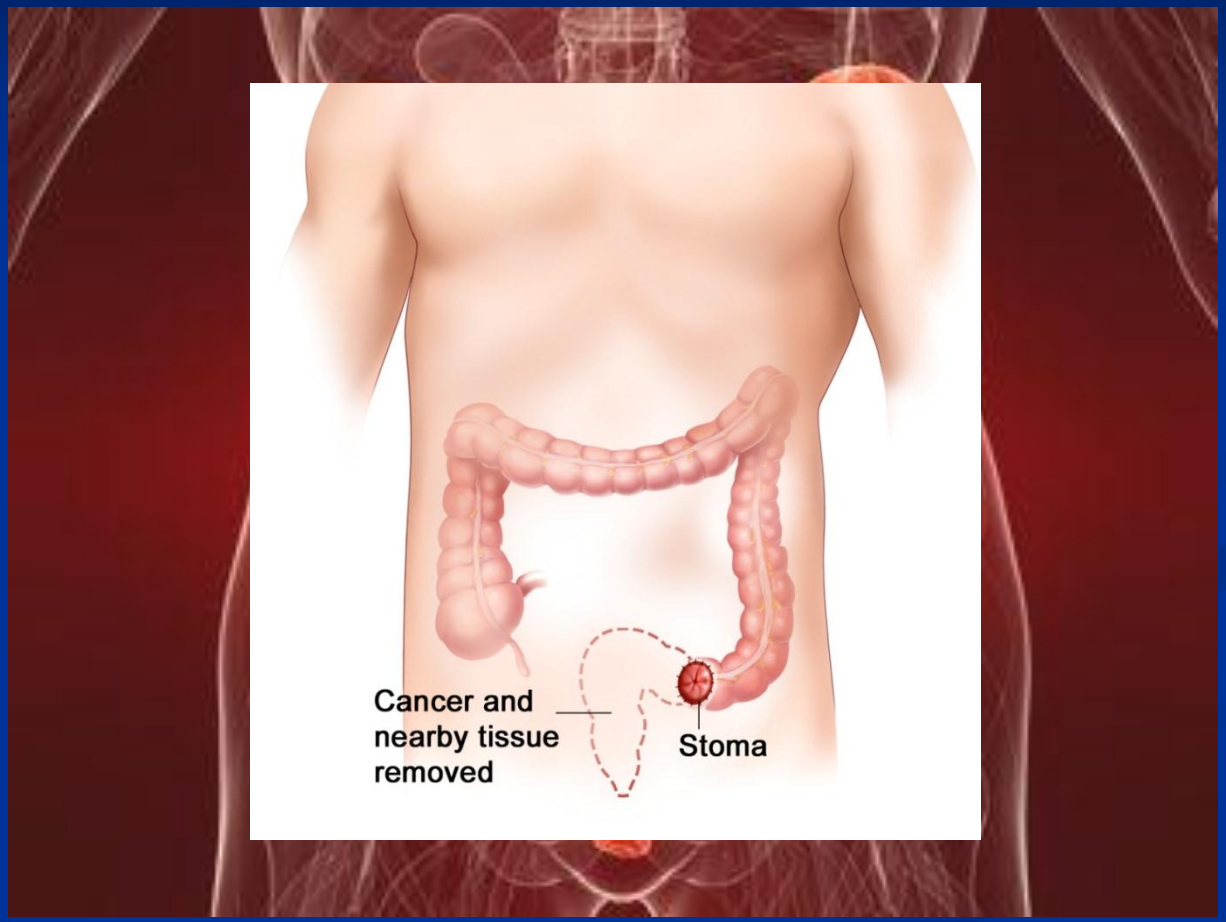

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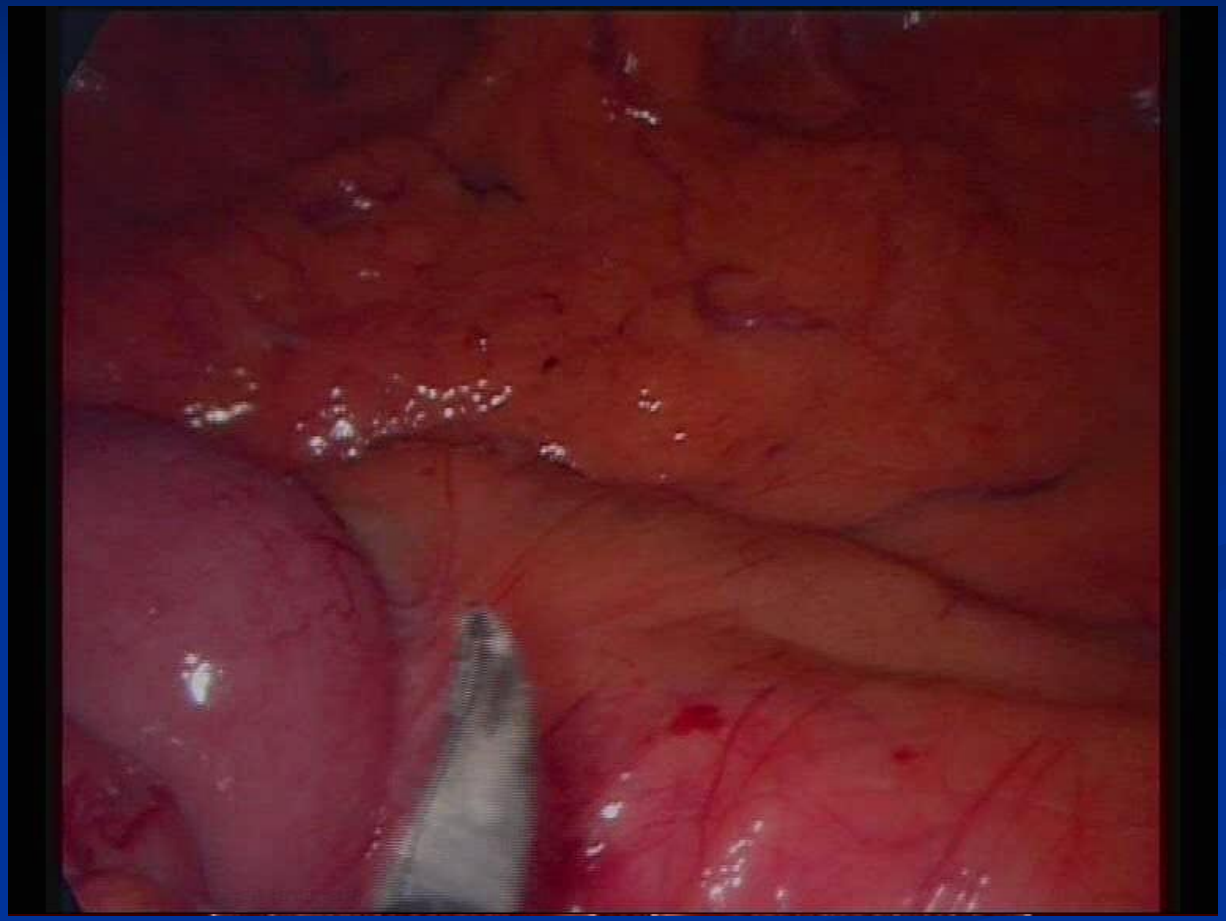
Operation



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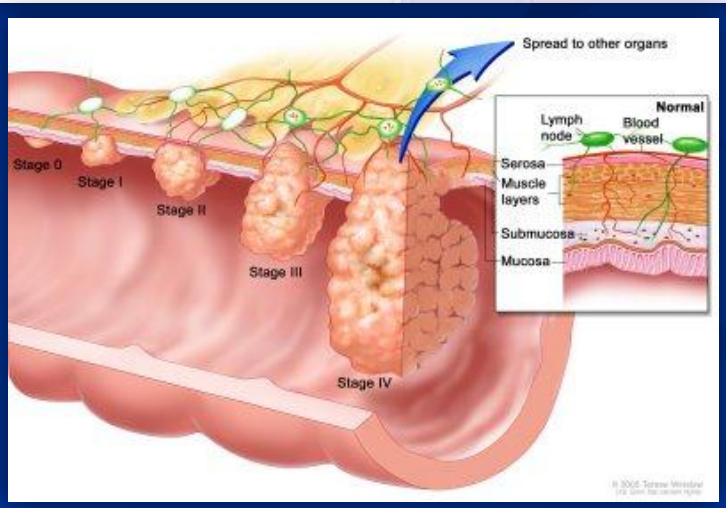
Complications/sequelae

- Postop mortality 2-5%

- Postoperative morbidity 30-40%
  - wound 10%
    - wound dehiscence
    - wound infection
    - wound hematoma
  - cardiorespiratory 10%
  - anastomotic dehiscence 5%
  - postoperative hemorrhage < 5%
  - stoma complications 10%
  - prolonged ileus 5%
  - urinary tract 10%

Prognosis

TNM Classification			
Tis	The cancer is confined to innermost layer of the colon or rectum	**N0**	There is no spread to lymph nodes
T1	The cancer has grown through the first few layers of the colon or rectum	**N1**	Cancer is found in 1-3 lymph nodes
T2	The cancer has grown into the thick muscular layer of the colon or rectum	**N2**	Cancer is found in four or more lymph nodes
T3	The cancer has grown through the entire colon or rectum wall	**M0**	There is no spread of cancer to distant organ(s)
T4	The cancer has grown through the entire colon or rectum wall and into nearby tissue or organs	**M1**	Cancer is found in distant organ(s)



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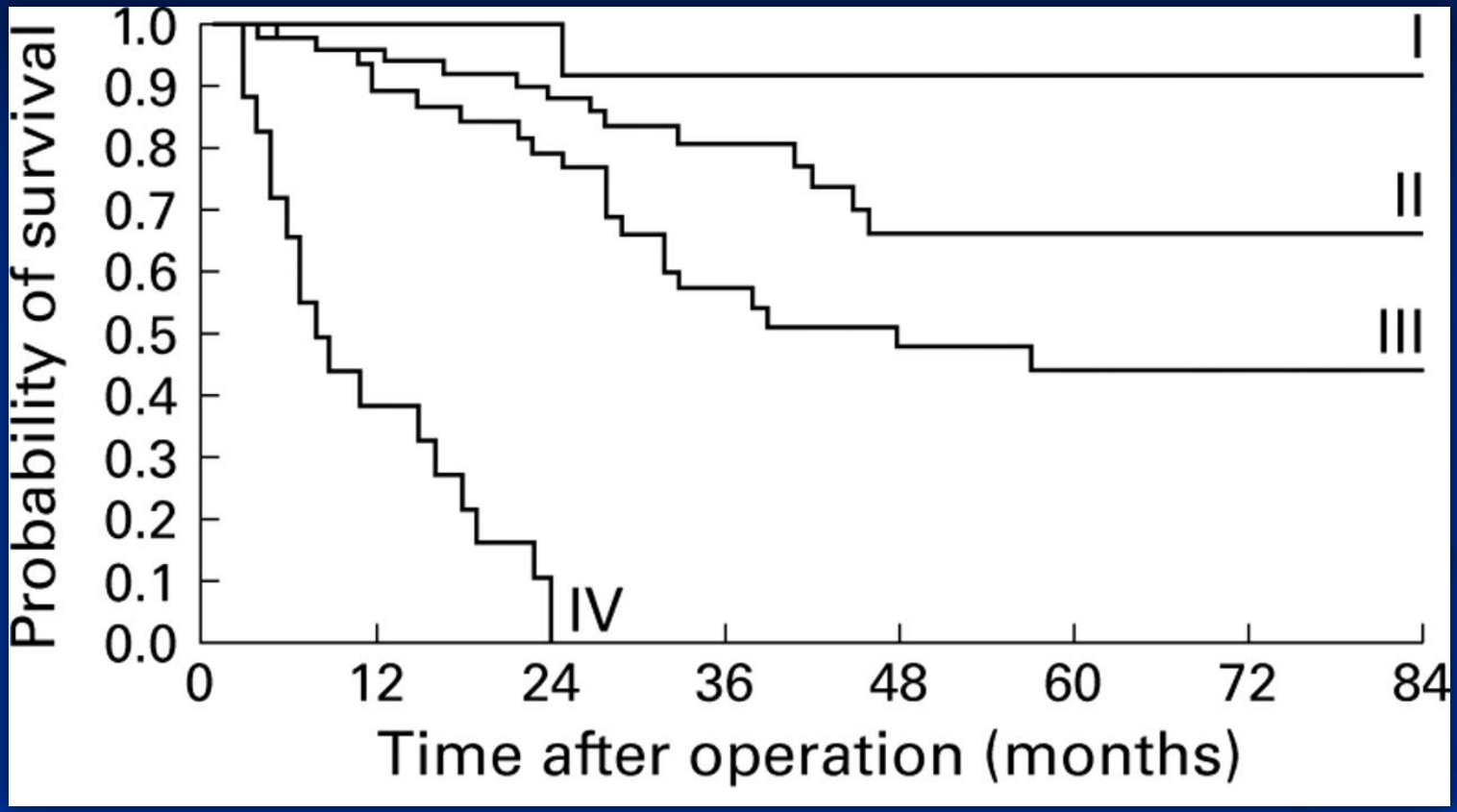

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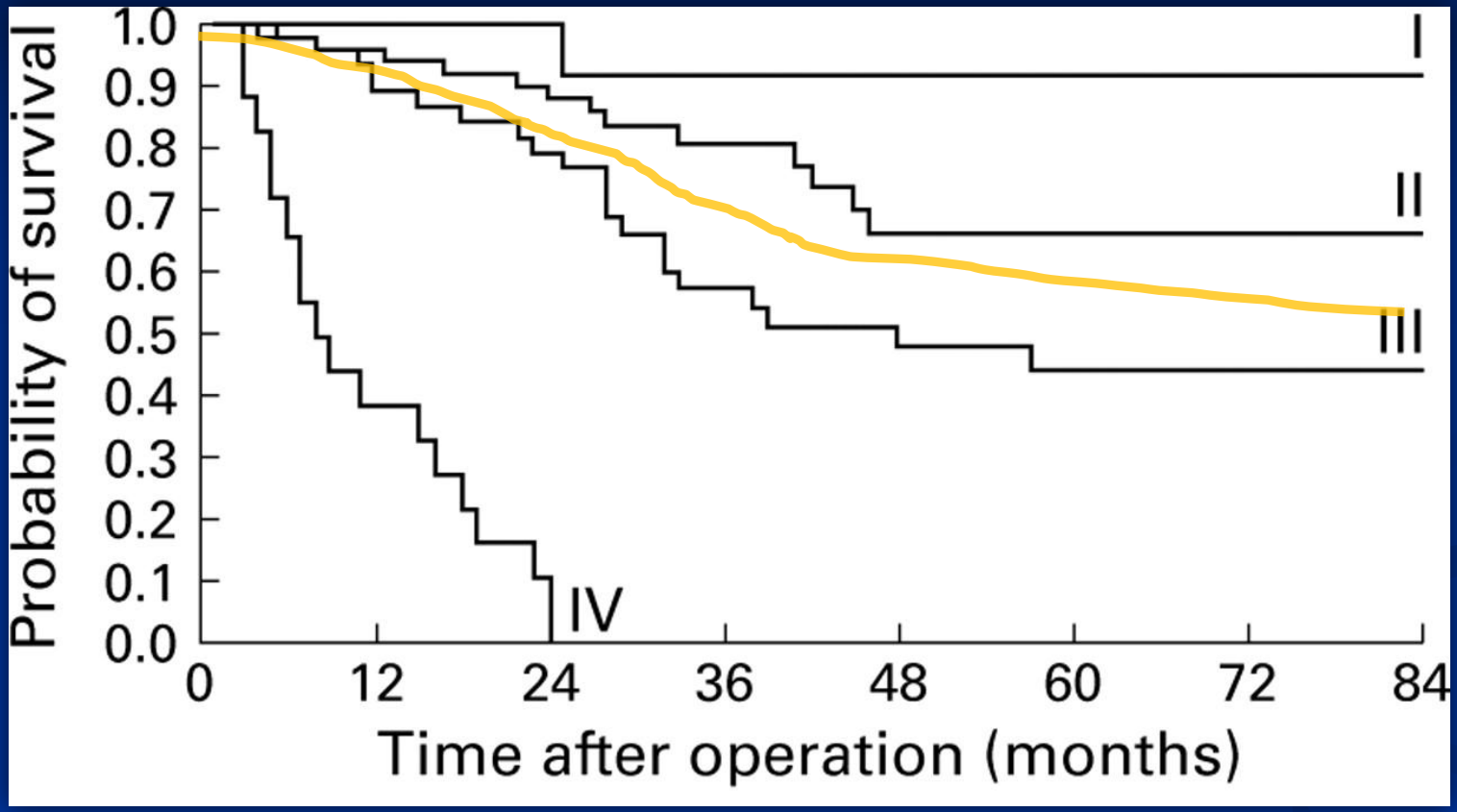
Postop treatment

- 'N' status usually dictates the need for chemotherapy
  - Usually 4 – 6 months
  - Infusion or tablets
  - *Generally* well-tolerated
  - Many clinical trials running
  - Improvement of survival by around 30%

- Little place for post-op radiotherapy



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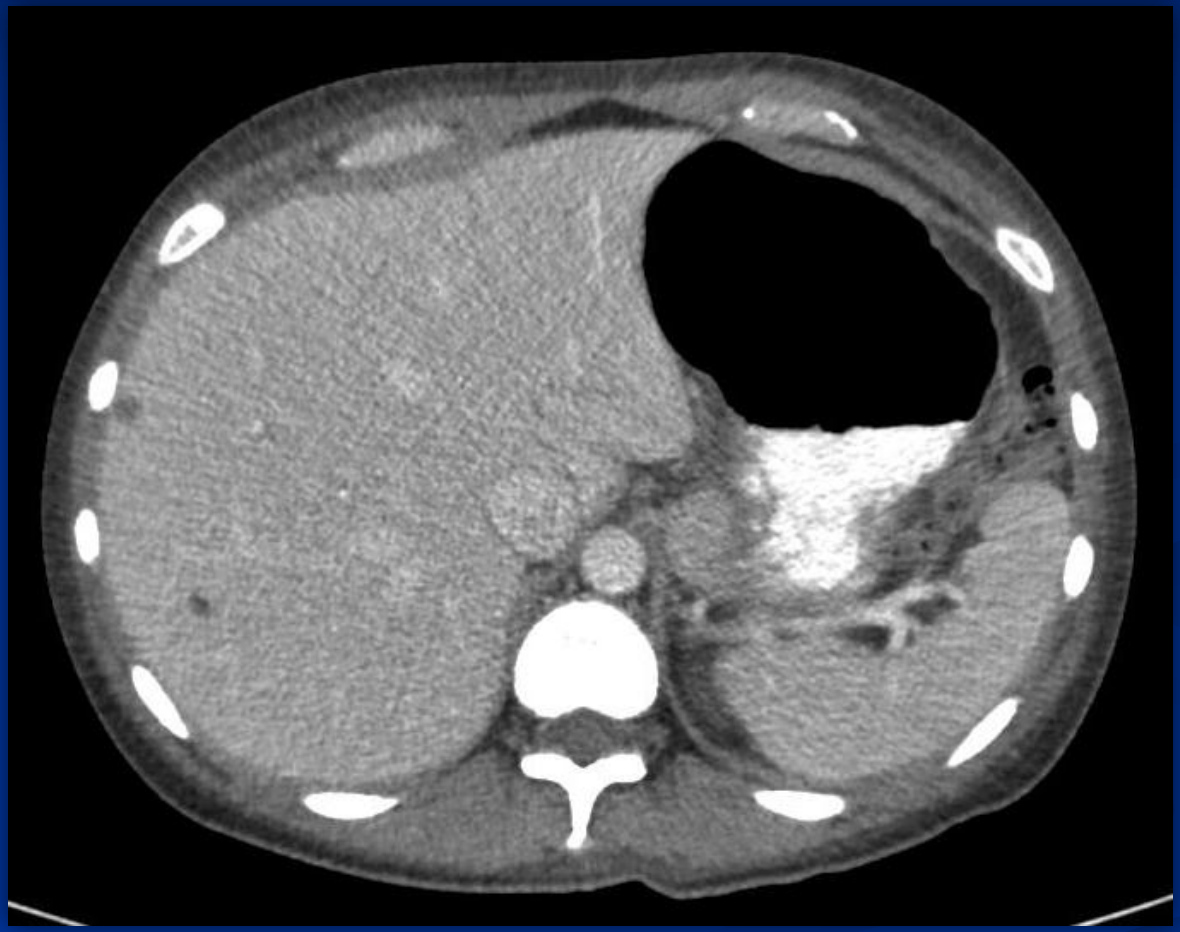
Follow up



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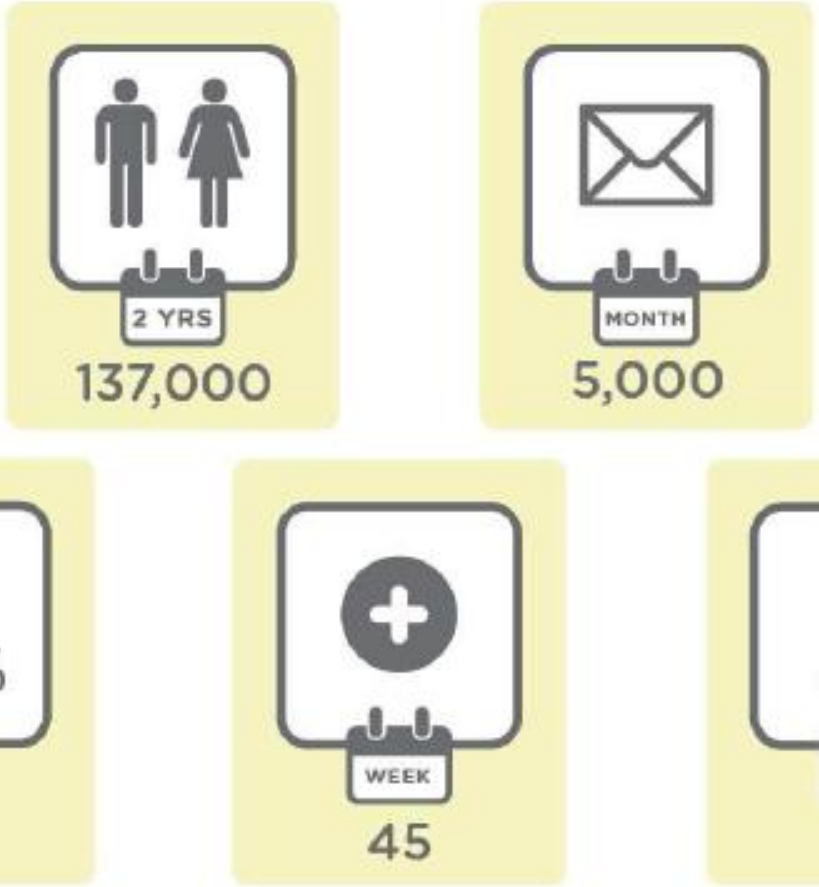
FREE BowelScreening programme

- Free programme to check people for early signs of bowel cancer
- Four-year pilot to test whether bowel screening should be introduced throughout NZ
- Offered to anyone aged 50 – 74, living in the Waitemata DHB area and eligible for publicly funded healthcare
- Invitation-based programme
- Central coordination centre
- Dedicated endoscopy
- Fully funded by Waitemata DHB

Positive results management

- GP receives patient's results 3 days after patient posts sample
- If blood is found in sample GP contacts patient to discuss results and refer to colonoscopy
- If no blood found in sample GP doesn't need to do anything and patient automatically recalled for screening within the 24 months of initial test
- GP refers patient to colonoscopy within 10 days
- Co-ordination centre is a safety net

Programme planning assumptions



NZ Familial Gastrointestinal Cancer Registry

Improving Outcomes for New Zealand Families

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The NZ Familial Gastrointestinal Cancer Registry is comprised of a multidisciplinary team that specialises in the assessment and management of familial gastrointestinal cancer. The team consists of family history assessors, gastroenterologists, colorectal surgeons, oncologists and geneticists. We work closely with genetic services in New Zealand.

We are a national service funded by the Ministry of Health with offices in Auckland and Christchurch.

What is Familial Gastrointestinal Cancer?

Is your family at risk?

Where can you get help?

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"Good news—it's not colon cancer, it's tinsel."

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