Colorectal Cancer and the Role of the CNS

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May 2011
Anatomy of the Bowel
The Bowel Wall
Blood Supply
Causes and Occurrence

- Diet
- Genetic
- Environmental factors
- Incidence increases with age beginning at 40 but remains relatively low until the age of 50 and then rapidly accelerates.
- Prevalence appears to double with each successive decade until about age 80.
- Personal history of adenomas or colorectal cancer are at increased risk.
- Family history of colorectal cancer or adenomas, various genetic polyposis and nonpolyposis syndromes, other cancers, and inflammatory bowel disease are also at higher risk of developing colorectal cancer.
Occurrence Sites

- **Transverse colon**: 10%
- **Right colon (ascending)**: 30% (occult bleeding, anemia)
- **Left colon (descending)**: 15%
- **Sigmoid colon**: 25% (obstructing symptoms, overt bleeding)
- **Rectum**: 20% (tenesmus, pain, bleeding)
Types of Colorectal Cancers

- All arise from adenomas or flat dysplasia
- Common
  - Adenocarcinoma
  - Mucinous carcinoma
- Less common and rare
  - Lymphoma
  - Leiomyosarcoma
  - Kaposi’s
  - Carcinoid
# Colorectal Registrations in NZ

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## Age at Registration

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Incidence and Mortality

• Most common cancer for males in incidence, second most common for mortality
• Second most common in incidence for female and mortality
• Incidence rate was forecast to decline while number of registrations was projected to increase – increasing population and aging.
Colorectal Cancer Screening

Taskforce to roll out bowel cancer screening programme
By STAFF REPORTER - The Southland Times | Wednesday, 13 August 2008

Bowel screening plan to be fast-tracked (+video)
The Dominion Post | Friday, 30 May 2008

Bowel cancer funding shows 'bold leadership'
Friday, 30 May 2008

New cancer test on way
North Harbour News
10 December 2010

NZ fails cancer victims – journal
11 May 2009

Beat Bowel Cancer Aotearoa
2015 Call to Action
April 2011

http://www.stuff.co.nz
Diagnosis and Investigation

- Most common symptoms – change in bowel habit, bleeding, pain, bowel obstruction
- Asymptomatic or incidental
- Colonoscopy
- Colonography
- CT – Chest/abdo
- Blood test – CEA
- CXR
### Staging

#### TNM Classification (American Joint Commission on Cancer) vs. Dukes' Classification

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<td>M0</td>
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<td>Any N</td>
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Treatment

- Neo adjuvant combined chemotherapy/radiation
- Surgery/stenting
- Adjuvant chemotherapy
- Palliative chemotherapy
- Palliative radiation
Follow up

• Dependent on stage of disease and treatment required
• Surgical alone
• Oncology while on treatment
• Metastatic – oncology continued
Evolution of the Colorectal CNS Role

- Colorectal CNS role developed in 2003
- Extension of the role in 2007 to include fast track surgery
- Beyond 2011 (mapping of bowel cancer and the patient journey)
Role of Colorectal CNS

• Follow up clinics
• Coordination of MDT
• Coordination of complex pelvic surgery
• Fast track surgery
• Phone/email access for patients, families, other providers
• Education
• Administration/Quality Improvement
Nurse Led Clinics

• Safe
• Effective
• Economically cheaper
• Patient satisfaction
• Good access and buy in from medical colleagues
• The role of the colorectal CNS in NZ is varied
Follow Up

• Reassurance/support for individuals and whanau
• Timely detection of recurrent or metastatic disease
• Education
• Functional and practical advice
• Referral to other providers
## Follow Up Protocol

### CDHB CRC follow up

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<tr>
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<th>6 Months</th>
<th>12 Months</th>
<th>18 Months</th>
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*Trial of coordinated approach between nurse clinic and GP*
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<thead>
<tr>
<th>Time since surgery</th>
<th>Follow up by</th>
<th>Purpose</th>
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<tbody>
<tr>
<td>24 - 48 hours</td>
<td>Phone call from Colorectal Nurse</td>
<td>Support and problem management</td>
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<tr>
<td>1 week post discharge</td>
<td>General Practitioner and Practice Nurse</td>
<td>Support • Issues and pain management • Clip removal</td>
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<tr>
<td>2 - 3 weeks</td>
<td>Surgeon</td>
<td>Histology and further management - may include referral to Oncology or referral for colonoscopy at 1 year if incomplete excision. <strong>Histology</strong></td>
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<td>24 months</td>
<td>Colorectal Nurse</td>
<td>Screening questionnaire Blood test - CEA Possible physical examination Education Discharge from Colorectal Surgery Department care with Colorectal Nurse for review if there are concerns.</td>
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<tr>
<td>30 months, and 36 months, and 48 months</td>
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Follow Up Review

950 patients entered into follow up database

474 patients actively enrolled

368 patients discharged

108 patients deceased

269 patients discharged free of disease

47 patients discharged to palliative care

24 patients discharged at their request

20 patients moved

4 patients went private

4 patients discharged to palliative care with a second primary cancer

98 patients deceased from CRC

10 patients deceased from other causes
Role of Oncology CNS

• Commenced July 2010
• Work alongside two medical oncologists
• Perform FSA
• Review patients initiated on adjuvant treatment
• One day a week split into two half days
• Commenced some chemo education
• Attend CRC MDT
Role of Oncology CNS

• Scope for development
  – Fill the gap between surgery and oncology
  – Undertake more education
  – Move into own nurse led clinic
  – Move into metastatic disease more
  – Role for telephone follow-up, community role
Gaps

- Better coordination of the patients journey
- Support for the patient from time of diagnosis
- Community oncology nurses
- Late effects
References/Resources

• Up to Date Online – http://uptodate.com
• MOH - http://www.nzhis.govt.nz/
• McMillan - http://www.macmillan.org.uk
• John Hopkins - http://www.hopkinscoloncancercenter.org/