Colorectal peritoneal metastases and IMPACT

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Peritoneal Malignancy Clinical Nurse Specialist
Peritoneal Malignancy Institute

• First operation - 1994
• National Referral Centre 2000
Cytoreduction (CRS) and Heated Intraperitoneal Chemotherapy (HIPEC)
Sugarbaker technique - Cytoreduction

- Right hemicolecctiony – removal of the right side of the colon
- Greater omentectomy – removal of the greater omentum
- Lesser omentectomy – removal of the lesser omentum
- Splenectomy – removal of the spleen
- Cholecystectomy – removal of the gallbladder
- Anterior resection
- Total abdominal hysterectomy and bilateral oopherectomy
• Stripping of the peritoneum from the left hemidiaphragm
• Stripping of the peritoneum from the right hemidiaphragm
• Stripping of disease from the surface of the liver
• Pelvic Peritoneectomy

• HIPEC

• If complete cytoreduction is not possible this is known as Maximal Tumour Debulking.
Colorectal Peritoneal Metastases
How Important is HIPEC?

HIPEC

Complete cytoreduction
CC score

CC-0
No evidence of disease

CC-1
Evidence of disease → 0.25 cm

CC-2
0.25 cm → 2.5 cm > 2.5 cm

CC-3

Randomized Trial of Cytoreduction and Hyperthermic Intraperitoneal Chemotherapy Versus Systemic Chemotherapy and Palliative Surgery in Patients With Peritoneal Carcinomatosis of Colorectal Cancer

Vic J. Verwaal, Serge van Ruth, Eelco de Bree, Gooike W. van Slooten, Harm van Tinteren, Henk Boot, and Frans A.N. Zoetmulder
Journal of Clinical Oncology 2003 21:20, 3737-3743

Log Rank p = 0.0013

44% versus 24% at 2 years
Peritoneal Colorectal Carcinomatosis Treated With Surgery and Perioperative Intraperitoneal Chemotherapy: Retrospective Analysis of 523 Patients From a Multicentric French Study

Dominique Elou, François Gilly, Florent Boustie, François Guenot, Jean-Marc Benaïm, Bassem El Mansieh.
• 5 year survival at
• least doubled

Table 2. Two- and five-year survival outcomes following CRS + HIPEC vs SC alone

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>2 Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>10</td>
<td>22</td>
<td>65</td>
<td>41</td>
</tr>
<tr>
<td>CRS + HIPEC</td>
<td>60</td>
<td>40</td>
<td>81</td>
<td>66</td>
</tr>
<tr>
<td>5 Years</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SC</td>
<td>5</td>
<td>10</td>
<td>13</td>
<td>5</td>
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<tr>
<td>CRS + HIPEC</td>
<td>28</td>
<td>19</td>
<td>51</td>
<td>26</td>
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Abbreviations: CRS = cytoreductive surgery; HIPEC = hyperthermic intraperitoneal chemotherapy; SC = systemic chemotherapy.
National Institute for Health and Clinical Excellence

CPM Commissioned in the UK

Cytoreduction surgery followed by hyperthermic intraoperative peritoneal chemotherapy for peritoneal carcinomatosis

This document replaces previous guidance on complete cytoreduction and heated intraoperative intraperitoneal chemotherapy (Sugraban technique) for peritoneal carcinomatosis (interventional) procedure guidance 118.

1 Guidance
1.1 Current evidence on the efficacy of cytoreduction surgery (CRS) followed by hyperthermic intraperitoneal chemotherapy (HIPEC) for peritoneal carcinomatosis showed limited improvement in survival for selected patients with colorectal metastases, but evidence is limited for other types of cancer. The evidence on safety shows significant risk of morbidity and mortality which need to be balanced against the potential benefit for each patient. Therefore, this procedure should only be used with special arrangements for clinical governance, cancer audit, and research.

2.3 Efficacy
2.3.1 A systematic review of 4500 patients with peritoneal carcinomatosis of colorectal origin reported an overall median 5-year survival of 19% (16 studies).
Patient selection
Peritoneal Cancer Index (Sugarbaker) PCI

Peritoneal Cancer Index

<table>
<thead>
<tr>
<th>Regions</th>
<th>Lesion Size</th>
<th>Lesion Size Score</th>
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<tbody>
<tr>
<td>0 Central</td>
<td></td>
<td>LS 0: No tumor seen</td>
</tr>
<tr>
<td>1 Right Upper</td>
<td></td>
<td>LS 1: Tumor up to 0.5 cm</td>
</tr>
<tr>
<td>2 Epigastrium</td>
<td></td>
<td>LS 2: Tumor up to 5.0 cm</td>
</tr>
<tr>
<td>3 Left Upper</td>
<td></td>
<td>LS 3: Tumor &gt; 5.0 cm or confluence</td>
</tr>
<tr>
<td>4 Left Flank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Left Lower</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Pelvis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Right Lower</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Right Flank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Upper Jejunum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Lower Jejunum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Upper Ileum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Lower Ileum</td>
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</table>

PCI from 0 to 39

Consensus
Milan 2006
Peritoneal Colorectal Carcinomatosis Treated With Surgery and Perioperative Intraperitoneal Chemotherapy: Retrospective Analysis of 523 Patients From a Multicentric French Study

Dominique Elias, François Gilly, Florent Bousitio, François Quenet, Jean-Marc Bereder, Baubruin Manwelt,
What does this mean for patients?
Road to recovery

- Referral
- Inpatient treatment
- 6-8 week period post discharge
- Months 3-6
Referral

• Clinical referral letter, CT imaging on IEP, histology, colonoscopy

• CRAM

• ? SMDT

• OPA
Initial appointment

- Main outpatient department
- 1 hour timeslot
- Consultant and Specialist Nurse
- Patient and relative
- Clinical, medical and social history
- Abdominal/rectal examination
- CT images viewed and explained
• Explanation of diagnosis
• Treatment/surveillance plan
• Letter dictated – sometimes in front of patient
• Discussion with Specialist Nurse
• Written information provided
• Signpost to other agencies
• Baseline bloods to include CEA, CA125, CA19.9
Common Concerns

- Work
- Mortgage and bills
- Travel
- Clothing

- Away from home
- Visitors
- What to tell Children
- Hereditary?
- Fertility

Macmillan
CAB
Maggies Centre

Macmillan
CNS
Stoma
Intimate relations
Scar
Umbilicus removal
Hair loss

Stoma counselling
GP
CNS

Complete?
Length of stay
Follow-up care
Prognosis

CNS
GP
Referring team
Inpatient treatment
<table>
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<tr>
<th>SUN</th>
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<th>TUE</th>
<th>WED</th>
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<td>9</td>
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<td>12</td>
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<tr>
<td>Admission</td>
<td>Surgery</td>
<td></td>
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</table>
Length of stay

- 21 day overall average
- Shortest = 13 days
- Longest = 64 days

![Graph showing length of stay over 12 months for Colorectal and Pseudomyxoma cases.](Image)
Nursing the complex patient in a ward environment

• Complex care needs
  • Epidural
  • Management of chest drains
  • Multiple abdominal drains
  • Stoma care
  • Analgesia
  • Early mobilisation
  • Nutrition
  • Emotional distress
Requirements for discharge

• Independently mobile
• Able to self care with ADL’s
• Independent with stoma
• Understand operation and follow-up
• Ideally to have discussed histology
• Wound care
Complications (12 months)

- Chest Infection
- SSI
- High Stoma Output
- UI
- DVT
- PE

Complication rate (%)

- PE
- DVT
- UI
- High Stoma Output
- SSI
- Chest Infection
Road to recovery

6-8 week period post discharge
6-8 weeks post-discharge

- Decreased mobility
- Impact on family life
- Unable to drive
- Body image
- Bowel function
- Emotional support

- Financial concerns

Quality of life studies show this to be the most difficult period in the recovery phase.

Nurse-led telephone follow-up

- 1 week, 6 weeks and 3 months
- Follows a set structure
- Encompasses all aspects of recovery
- Letter sent to GP, patient, referring team and HHFT consultant
- OPA’s made if required
- Extra calls scheduled according to need
- Open access service provided
Road to recovery

Months 3-6

WHAT DOES QUALITY OF LIFE MEAN TO YOU?
Beyond their clinical recovery, adjusting to their new lives, limitations, expectations, realities etc. can require coming to terms with a new version of themselves and of what their life is going to look like – even if the actual change is relatively minor, the perception of change can have a significant impact in its own right.
Surveillance/chemotherapy and moving forwards

• Referred back to colorectal team locally

• Advised to have further discussions with oncology team
A National Development Programme for all colorectal MDTs around GB and Ireland to discuss optimal referral and treatment for colorectal cancer patients with advanced disease.

Programme was designed by an expert steering group with representatives from units around the UK.

Aim = to help patients get the best treatment, at the best time, in the best place for them.
IMPACT brings together the teams from all the units within each network, encouraging collaboration and understanding of local activity.

Before the workshop every MDT is sent:

• a case study to discuss in their MDT

• asked to complete a spreadsheet with details of new CRC cases first presented in their MDT in one month (January 2015) and the outcomes of these cases 36 months later (June 2017).
So far we have had three workshops:

• 26th January in Basingstoke
• 21st March in York
• 2nd May in Edinburgh

411 people have attended a Pelican IMPACT workshop.
- Colorectal lung metastases
- Colorectal liver metastases (surgery)
- Colorectal liver metastases (oncology)
- Colorectal peritoneal metastases / metachronous disease
- Colorectal T4 tumour, locally advanced primary
- Local recurrence of rectal cancer
<table>
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<tr>
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<td>2018</td>
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<tr>
<td>Mon 17\textsuperscript{th} September</td>
<td>Northern</td>
<td>Royal Victoria Infirmary, CRB Education Centre, Newcastle</td>
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<tr>
<td>Fri 23\textsuperscript{rd} November</td>
<td>Gtr Manchester / Merseyside</td>
<td>The LifeCentre, Sale, Manchester M33 4BP,</td>
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<tr>
<td>Mon 10\textsuperscript{th} December</td>
<td>Ireland</td>
<td>Mater Hospital, Dublin</td>
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<tr>
<td>2019</td>
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<td></td>
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<tr>
<td>Fri 25\textsuperscript{th} January</td>
<td>East Midalnd</td>
<td>Radisson Blu East Midlands Airport, Derby</td>
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<tr>
<td>Wed 20\textsuperscript{th} March</td>
<td>East of England</td>
<td>Newmarket Race Course, CB8 OTG</td>
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<tr>
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Thank you for your attention.