Oncological Surgery: general principles

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Training Course for Advanced Oncologic Laparoscopy

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Oncological Surgery: general principles

Staging:

Preoperative

Intraoperative

Postoperative
Oncological Surgery: general principles

**Extension of the tumor**

- **Local**
- **Regional**
  - Surrounding organs involved
- **Systemic**
  - Peritoneal carcinosis
  - Liver metastasis (US intraop)
Oncological Surgery: general principles

Curative procedure means:

- Carcinologic removal of the tumor
- Isolation of the tumor
- Avoidance of contamination
Oncological Surgery: general principles

Carcinologic removal of the tumor:

- Security margins
- Adequate number of lymphnodes
- ‘En-un-bloc’ removal of involved organs
- Resection of liver metastasis
Oncological Surgery: general principles

Isolation of the tumor

- Occlusion of the lumen above and below the tumor
- Suppression of blood supply
Oncological Surgery: general principles

Avoid contamination:

- No-touch technique
- Securing and rinsing port sites
- Rinsing distal part of the bowel
- Protection of tumor removal site
Oncological laparoscopy: step-by-step

- Umbilical trocart: 10/12 mm via open laparoscopy
- Exploration of the peritoneal cavity (visceral & parietal)
- 2\textsuperscript{nd} trocart: 10/12 mm – right iliac fossa
Oncological laparoscopy: step-by-step

- US of the liver by following the portal vein branch divisions

- 2-3 trocarts: 5mm: laparoscopically guided and according to the best triangular position

- Positioning of the patient
Laparoscopy versus laparotomy

Finlayson 2005

Outcomes:

- Wound & local recurrence rates, overall survival rates: similar
- Wound infections, anastomotic leaks: infrequent in both groups
- Adequacy of resection margins and number of lymphnodes resected: similar
## Laparoscopy versus laparotomy

### Time to bowel movement (days)

<table>
<thead>
<tr>
<th>Study</th>
<th>Laparoscopic</th>
<th>Open</th>
<th>P-value</th>
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<tr>
<td>Schwenk 1998</td>
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<td>3.8 (SE 0.9)</td>
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<td>Milsom 1998</td>
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<td>Leung 2004</td>
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<td>Braga 2002</td>
<td>4.7 (SE 0.8)</td>
<td>5.7 (SE 1.1)</td>
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## Laparoscopy versus Laparotomy

*Finlayson 2005*

<table>
<thead>
<tr>
<th>Length of Hospital stay (days)</th>
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<th>P-value</th>
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<tbody>
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<td>Milsom 1998</td>
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<td>7 (range 5-24)</td>
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<tr>
<td>Braga 2002</td>
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<td>Leung 2004</td>
<td>8.2 (range 2-99)</td>
<td>8.7 (range 3-39)</td>
<td>&lt;0.001</td>
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References


Swanson RS et al. The prognosis of T3N0 colon cancer is dependent on the number of lymph nodes examined. Ann Surg Oncol 2003;10(1):65