



Oncological Surgery: general principles

Dr Pierre Meyer, Senior Lecturer
Dr Jean-Marie Megevand

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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 trocar: 10/12 mm via open laparoscopy
- Exploration of the peritoneal cavity (visceral & parietal)
- 2nd trocar: 10/12 mm – right iliac fossa



Oncological laparoscopy: step-by-step

- US of the liver by following the portal vein branch divisions
- 2-3 trocars: 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

Finlayson 2005

Time to bowel movement (days)	Laparoscopic	Open	P-value
Schwenk 1998	2.9 (SE 1.3)	3.8 (SE 0.9)	<0.01
Milsom 1998	4.8 (range 1.5-8)	4.8 (1.5-14.5)	NS
Leung 2004	4 (range 1-13)	4.6 (range 1-16)	0.003
Braga 2002	4.7 (SE 0.8)	5.7 (SE 1.1)	<0.0001



Laparoscopy versus laparotomy

Finlayson 2005

Length of Hospital stay (days)	Laparoscopic	Open	P-value
Milsom 1998	6 (range 3-37)	7 (range 5-24)	0.16
Braga 2002	10.4 SE 2.9	12.5 SE 4.1	<0.001
Leung 2004	8.2 (range 2-99)	8.7 (range 3-39)	<0.001



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