



Late Complications

International workshop on

**Management of
Peritoneal Surface
Malignancy**

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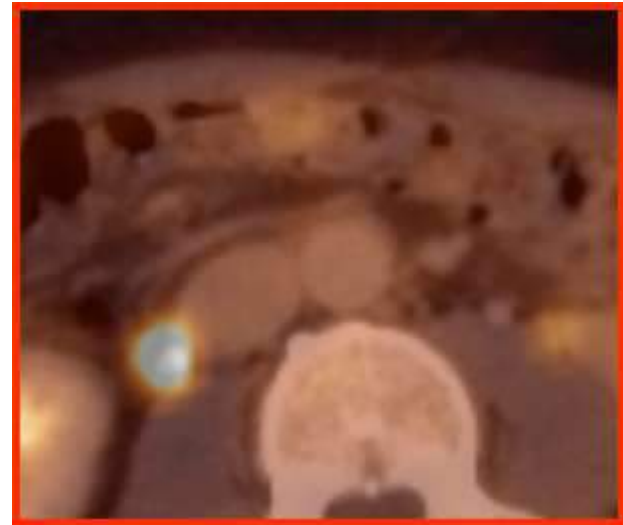
Interactive Case discussion

1. Case Male 47 years

History

- 10/2005 Laparoscopic appendectomy // hemicolectomy
 - FD Appendix carcinoma pT4 pN1 (1/71) M0 L1 V0 G2 R0
- Until 6/2006 12 cycl. FOLFOX
- 7/2012 CEA elevation to 4,2 µg/l (7/2010: CEA 2,3 µg/l)
- 9/2012 PET-CT suspect lesion
 - in the mesentery near abdominal wall
 - Small pelvis iliacal

PET CT 18.09.2012



Treatment

- 11/2012 laparoscopy PCI 9
- 11/2012 gastric wedge resection, colectomy and ileorectostomy CCR 0
- Bidirectional HIPEC; 60 minutes; 42 °C
 - Oxaliplatin 598mg i.p.
 - 5-FU 797mg i.v. and LV 40mg i.v.

Lesion in the mesenteric route



Follow up

Uneventful stay

2 days ICU

Discharge after 19 days altogether

Follow up

Readmission 3 weeks later (5 weeks postoperatively)

Reduction of general condition

Weight loss

Follow up



Any ideas?

Intraabdominal abscess

Therapy?



CT guided drainage

Через 2 года

хорошее состояние
На КТ нет опухолей
уровень СЕА 1,7 мкг/л



2. Case Female 53 years

History

Since 3 months abdominal pressure

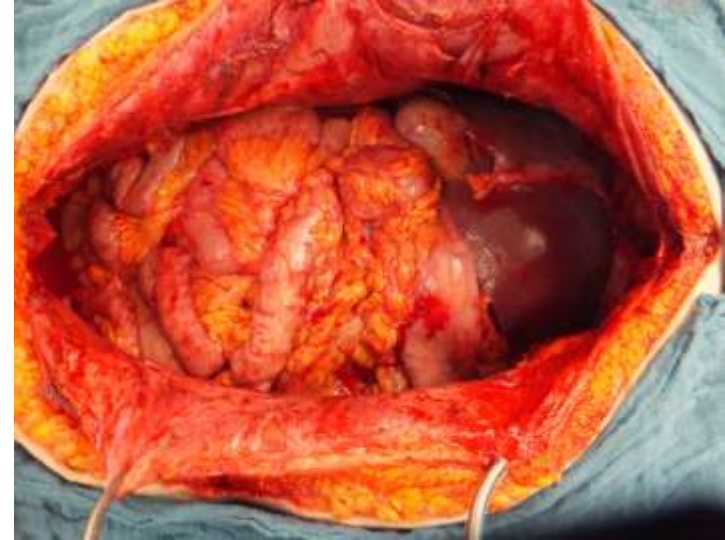
9/2012 Sonography and CT

Big tumour mass

CT Scan



Treatment



- > Coecum resection, infragastric omentectomy, extraperitoneal AR plus hysterectomy and salpingoovarectomy en bloc (17 l Mucus)
- > HIPEC: CDDP and MMC
- > pT4b pM1b G1 Appendixcarcinoma

Neutropenia

There are three general guidelines used to classify the severity of neutropenia based on the absolute neutrophil count (ANC) measured in cells per microliter of blood:

- **Risk of infection:**
- **Minimal or Mild:** neutropenia $1000 \leq \text{ANC} < 1500$
- **Moderate:** neutropenia $500 \leq \text{ANC} < 1000$
- **Severe:** neutropenia $\text{ANC} < 500$

Французский анализ 2010 года

study included 1290 patients from 25 institutions who underwent 1344 procedures between February 1989 and December 2007. HIPEC was performed in 1154 procedures. The principal origins of PC were colorectal adenocarcinoma (N = 523), pseudomyxoma peritonei (N = 301), gastric adenocarcinoma (N = 159), peritoneal mesothelioma (N = 88), and appendiceal adenocarcinoma (N = 50). The overall morbidity and mortality rates were 33.6% and 4.1%, respectively. In

Table 4. Details of Major Complications (Grade 3/4 According to the National Cancer Institute Common Toxicity Criteria)

Type of Complication	No. of Patients	%
Grade 3-4 complications	422	33.6
Reoperations	178	14
Neutropenia	161	13.3
Digestive fistula	123	9.7
Pneumonia	115	9.1
Postoperative bleeding	95	7.7
Intra-abdominal abscess	90	7
Systemic sepsis	32	2.3
Bowel obstruction	20	1.5
Renal insufficiency	14	1

One of the most important issues arising from our analysis is the strong influence of the institution not only on survival but also on morbidity and morbidity rates.

The institution in which the procedure was performed was an independent prognostic indicator of postoperative complications. When comparing centers that performed

Первые выводы

Заболеваемость и смертность не выше, чем после других
„правильных“ процедур панкреатической хирургии

НО

[12]. Thus, fear of a severe post-operative course is no longer an acceptable reason for not using CCRS and HIPEC.

Подумайте о кривой обучения...

Так как мы можем бороться с осложнениями?

First of all, try to prevent them:

- Select your patient careful!
- Establish a rigorous preoperative work-up! SOP!
- Be aware of your learning curve

Second, detect and report them:

- Train your assistants!
- See your patient daily by your own!
- Always remember: they can come along with a severe complication even 10 days after surgery!

And third, manage them:

- Look at your hospital! You'll need
 - an excellent anesthetist
 - an experienced intensivist
 - a brave endoscopist
- an uncomplaining interventional radiologist

Conclusions

- Generally: manage your complications the earlier, the more aggressive.
- WE do not perform protective stoma in rectal resections.
- Whenever in doubt, you should do re-laparotomy...

So the bottom line is: manage your HIPEC-complications like you manage your complications in other cases.

Do it that way you are most familiar with.