

Indications for CRS + HIPEC

Appendiceal Cancer

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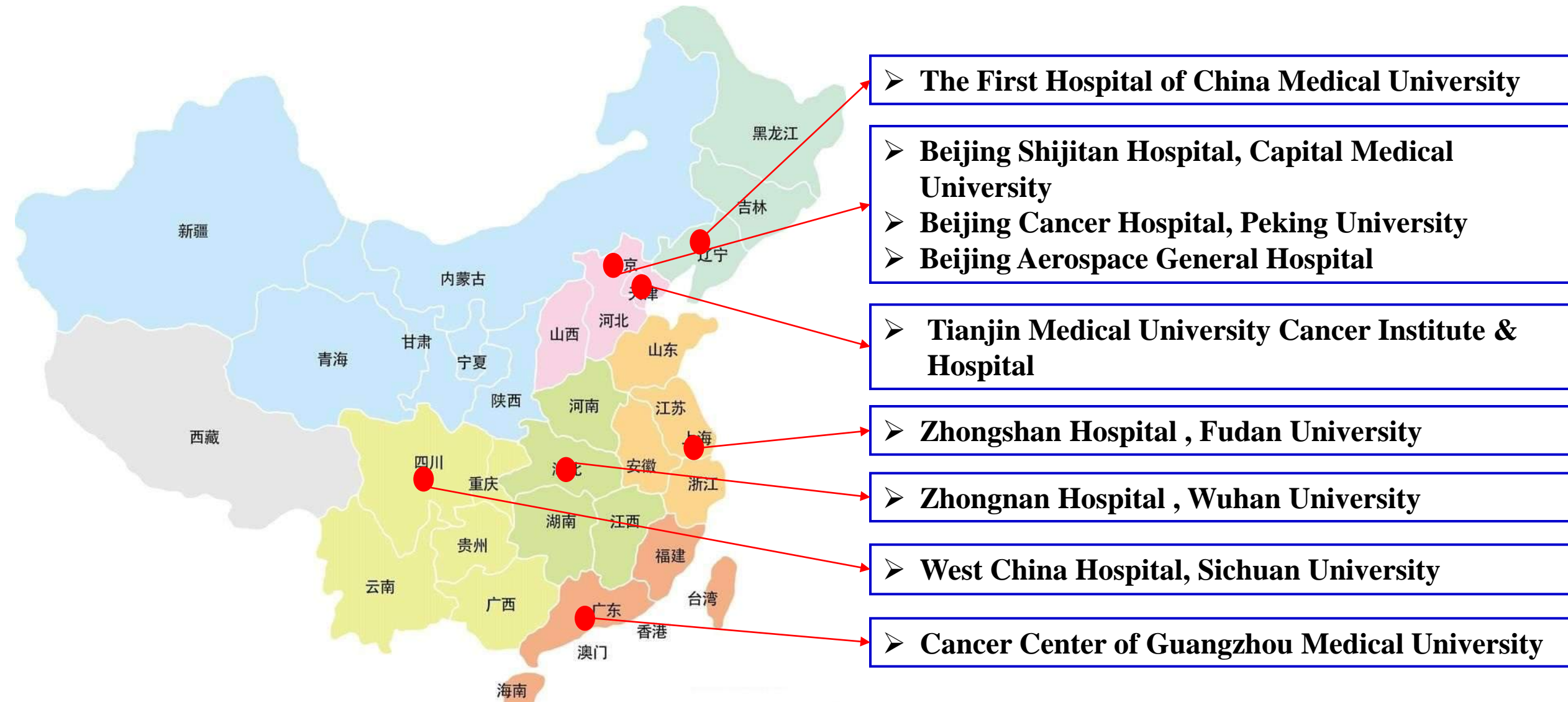
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Content

- 1. Peritoneal Carcinomatosis in China**
- 2. CRS + HIPEC Experiences at Our center**
- 3. CRS + HIPEC for Appendiceal Cancer**

Cancer Centers Focusing on CRS+HIPEC for PC in China



Geographic Distribution of 645 Patients



- 10 years
- 645 patients
- 3 countries
- 31 regions

CRS + HIPEC Experience at Our Center

Table 1. Clinical Characteristics of 645 PC patients treated at our center

Characteristic	Value	Characteristic	Value
Age (Year)		Gender	
Median (Range)	52 (21-87)	Male/Female	264/381
Primary disease		PCI	
Colorectal	145	Midian	19
Pseudomyxoma peritonei	156	<20	301
Ovarian	91	≥20	298
Mesothelioma	27	CC	
Gastric	133	Midian	1
Primary peritoneal	29	0-1	358
Liposarcoma	25	2-3	242
Liomyosarcoma	5		
Others	24		

➤ **From December, 2007 to July, 2017**

➤ **645 patients with CRS + HIPEC procedures**

Appendiceal Cancer PC

Table 2. Major clinic-pathologic characteristic of 42 patients of appendiceal cancer PC

Characteristics	Value (n, %)
Numbers	42(100)
Age(Year)	
Median age (range)	50(24-81)
Gender	
Male	23(54.8)
Female	19(45.2)
PCI	
Median PCI (range)	31(1-39)
CC	
Median CC (range)	2(0-3)
Excised organs	
Median (range)	3(0-8)
Pathological type	
Moderately-poorly differentiated adenocarcinoma	1(2.4)
Moderately differentiated adenocarcinoma	2(4.8)
Mucinous adenocarcinoma	23(54.8)
Low-level mucinous adenocarcinoma	5(11.9)
High-level mucinous adenocarcinoma	9(21.4)
Mucinous cystadenoma	2(4.8)

- **From December, 2007 to July, 2017**
- **42 appendiceal cancer PC with CRS + HIPEC**

Preoperative workup for CRS + HIPEC

➤ Routine examination

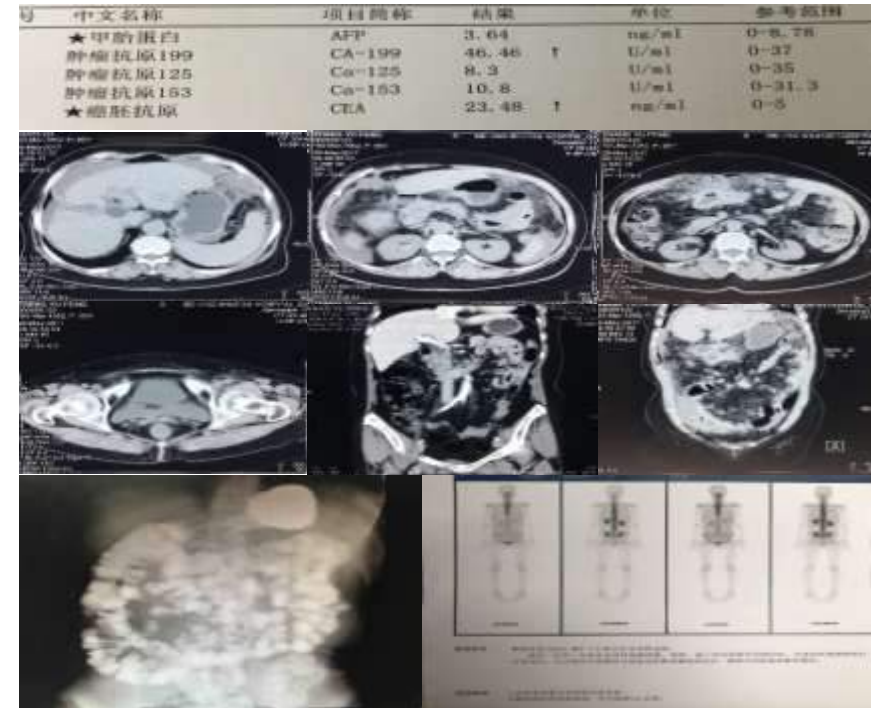
Blood routine, Urine routine, Stool routine,
Blood type, HBV five markers, TPA, HIV,
Chest radiography, Electrocardiogram

➤ Hematologic examination

Tumor markers, Blood biochemistry,
Coagulation function, Myocardial enzymes,
BNP

➤ Image examination

Pulmonary CT scan, Abdominal CT scan,
Pelvic CT scan, Gastroenterography,
Radionuclide bone imaging



➤ Others

Pulmonary function, Echocardiography, The
lower vascular ultrasound, Colonoscopy,
Gastroscope, CTA, MRA

CRS Procedures



Supine position
IPC



Disinfect
Incision



Bladder filling system



Team
Operation



Exploration
PCI



Resection of primary tumor



Adjacent organs
Peritonectomy



Specimen

HIPEC Protocols

- Docetaxel 120 mg + Cisplatin 120 mg
Docetaxel 120 mg + Mitomycin C 30 mg
Docetaxel 90 mg + Lobaplatin 100 mg
Mitomycin C 30 mg + Cisplatin 120 mg
Mitomycin C 30 mg
- 3 L of saline respectively
- $43 \pm 0.5^{\circ}\text{C}$
- 400 ml/min
- 30 min respectively



Postoperative courses

- Abdominal exploration secondly, CC
- Drainage tubes, close the wound
- Recovery

- Chemotherapy after operation

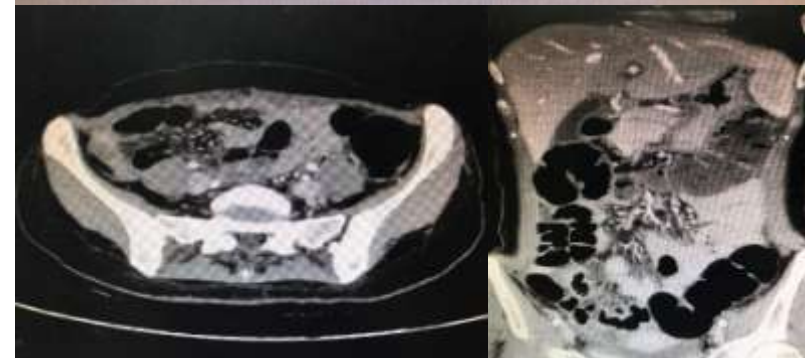
FOLFOX / FOLFIRI

6 – 8 cycles

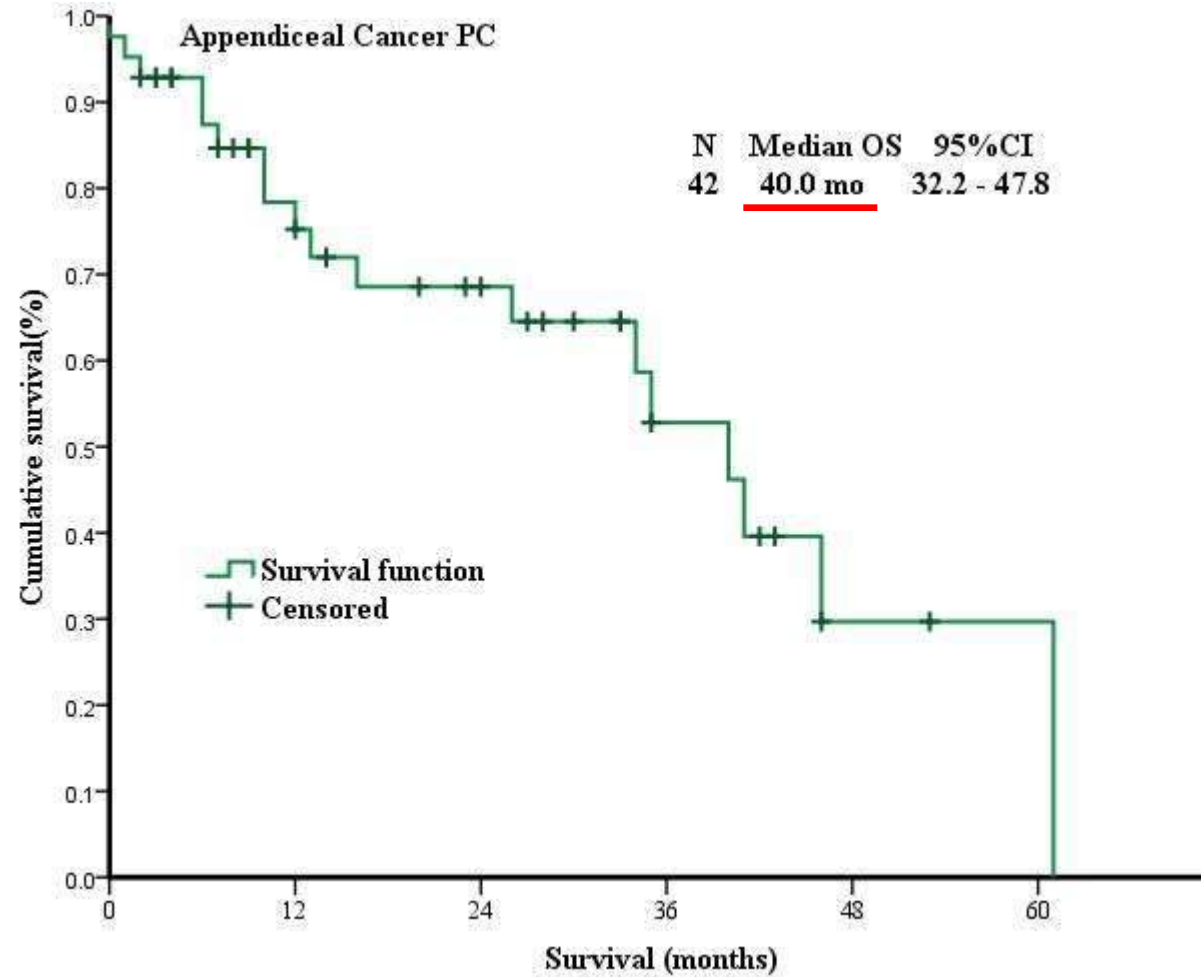
- Follow up
 - < 0.5 year, monthly
 - 0.5 – 1 year, trimonthly
 - > 1 year, every half year



检测项目	英文名称	结果	单位	参考值
★甲胎蛋白	AFP	1.84	ng/ml	0-8.78
糖类抗原199	CA-199	< 2.00	U/ml	0-37
肿瘤抗原125	CA-125	12.3	U/ml	0-35
★癌胚抗原	CEA	0.74	ng/ml	0-5



Survival Analysis



Typical Case 1

Female, 53 years old

Recurrent appendiceal cancer with PC

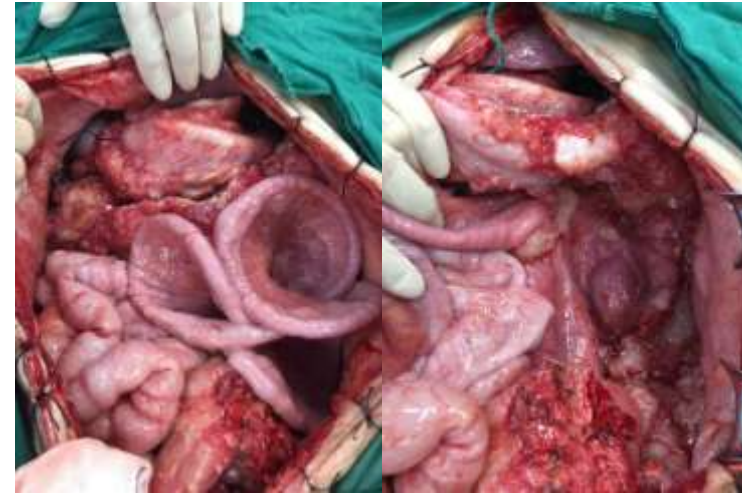
Mucinous adenocarcinoma

2013/02/27 first CRS

2017/01/17 second CRS+HIPEC

2017/7/17 OK

OS > 53 months



Typical Case 2

入院日期	2008. 1. 2	记录	2008. 1. 2
主诉:	左卵巢粘液性囊腺瘤术后3年, 腹痛、腹胀3月		
现病史:	患者于2004年12月9日因“左侧卵巢粘液性囊腺瘤”		
癌胚抗原	89.39	↑	ng/ml
甲胎蛋白	2.90		ng/ml
糖基抗原CA125	51.5	↑	U/ml
糖基抗原CA153	12.9		U/ml
糖基抗原CA199	542.00	↑	U/ml



Female, 61 years old

Recurrent EOC

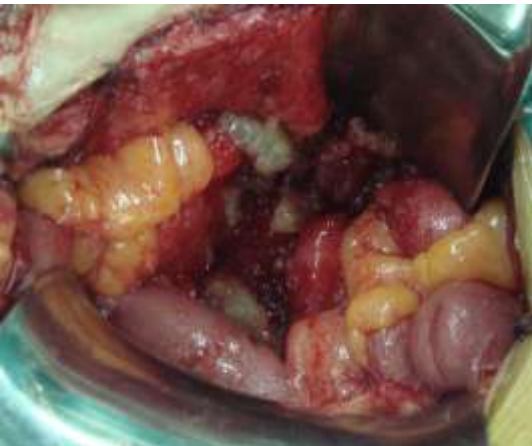
Mucinous type

2004/12/09 first surgery

2008/01/05 second CRS+HIPEC

2017/04/08 OK

OS>12 years



Conclusions

- 1. Appendiceal cancer: rare disease with late clinical presentation**
- 2. Conventional therapy brings no survival advantage**
- 3. CRS + HIPEC is the treatment of choice**
- 4. Indications: Pts with no liver/lung metastasis are candidates**

Thank you for your attention!



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