

Session II

## A Case of Surgery after Palliative Chemotherapy in Advanced Intrahepatic Cholangiocarcinoma

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### 1. Case presentation

A 74-year-old woman visited our clinic for epigastric pain.

### 2. Diagnosis

- Intrahepatic cholangiocarcinoma at left hepatic lobe.
- Multiple retroperitoneal lymph node metastases.

### 3. Therapy and Clinical course

- During palliative 1<sup>st</sup> line 13<sup>th</sup> cycle Gemcitabine/Cisplatin, repetitive neutropenia, infection, nephrotoxicity was occurred.
- Because of no tumor progression and adverse effect of chemotherapy, we decided on curative surgical resection

### 4. Conclusion

The surgical resection was successful, but she expired due to fungemia.

**Key words:** Intrahepatic cholangiocarcinoma, Surgery, Chemotherapy

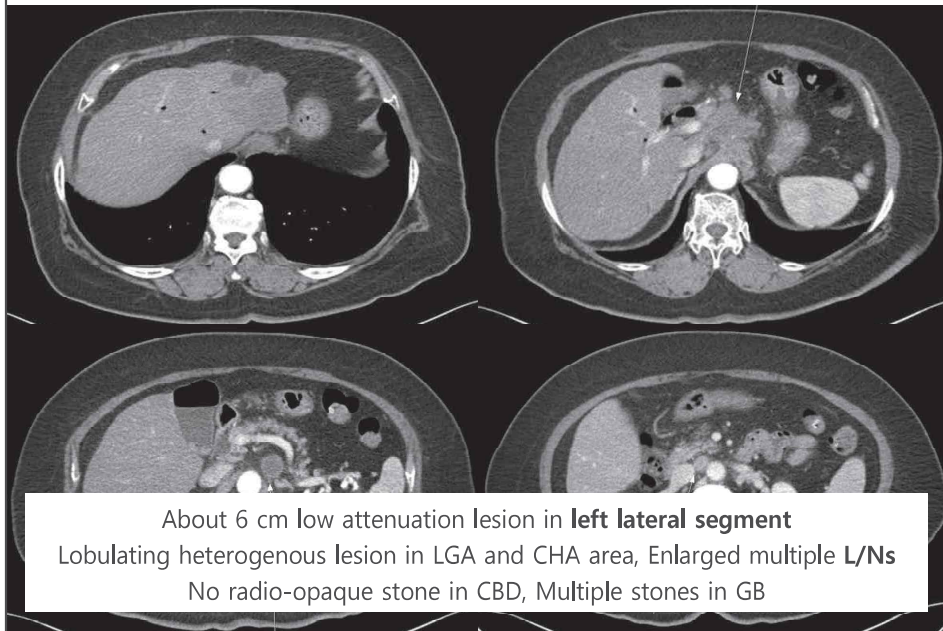
## REFERENCE

1. HJ Yang, et al. Pathologic Complete Remission in a Patient with Locally Advanced Unresectable Intrahepatic Cholangiocarcinoma Treated with Chemotherapy. Korean J Pancreas Biliary Tract 2017;22(4):188-192.
2. Hepatobiliary cancers. Version 3. 2019. NCCN clinical practice guidelines in oncology
3. HJ Baik, et al. Treatment of advanced stage cholangiocarcinoma: Systemic therapy may be the starting step for radical surgery. Korean Journal of Clinical Oncology 2018;14(1):62-65.

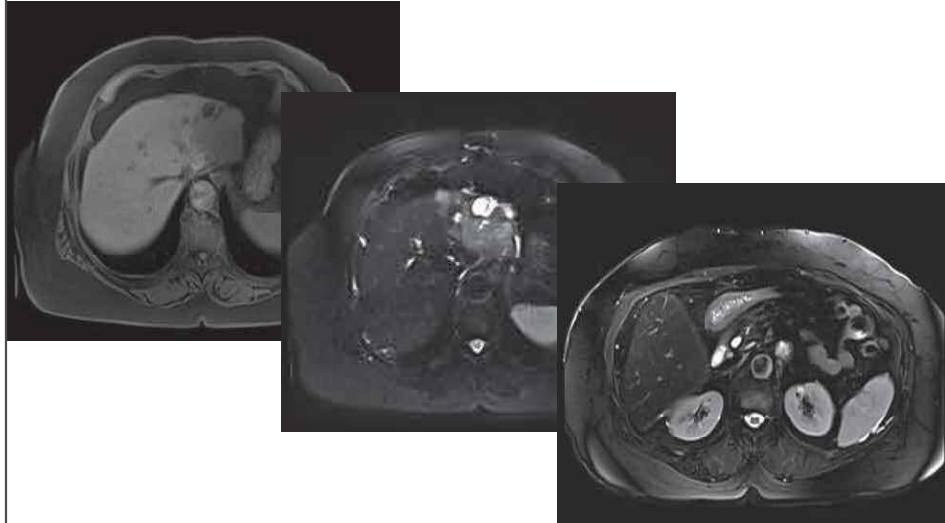
### Present illness

- 11년 전 biliary pancreatitis d/t **CBD stone**으로 ERCP with stone removal 시행하였던 분.  
→ 당시 **Lt. IHD stone** 동반되었으나 F/U loss
- 내원 1달 전부터 **epigastric pain** 지속되어 내원함.  
→ 위내시경 : Superficial gastritis
- **GB & Biliary CT** for biliary stone

### GB & Biliary CT



## Liver MRI & MRCP

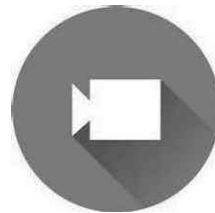


About **6 cm low signal intensity** in left lateral segment at T1  
high signal at T2

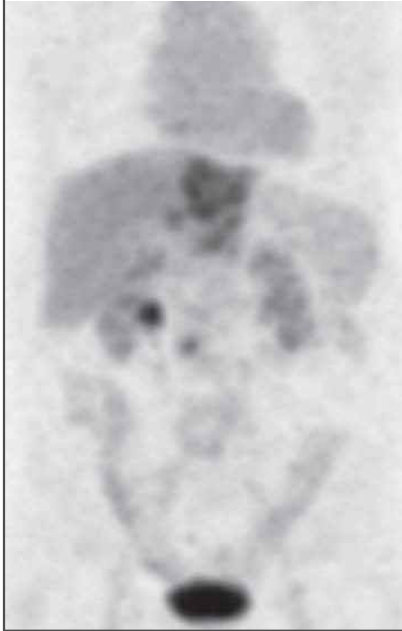
## Tumor marker

- Tumor marker
  - : AFP 3.55 (0-7)
  - : **CEA 6.00 (0-4.3)**
  - : **CA19-9 6.21 (0-27)**

- 대장내시경 : nonspecific finding

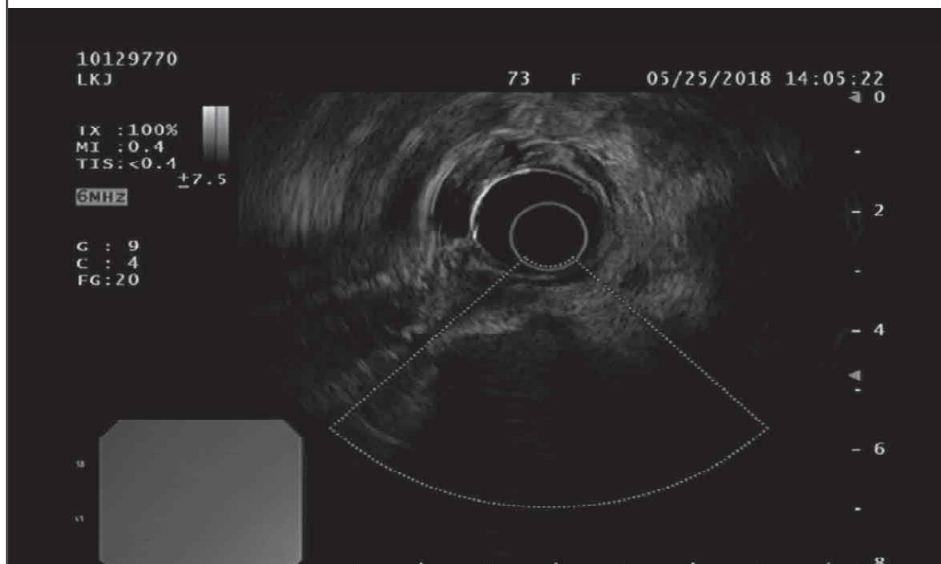


## Whole body PET CT



1. Large & uneven **hypermetabolic mass**  
(maxSUV = 5.9) at **Lt. lobe**
2. **Multiple hypermetabolic lymph nodes** at Left gastric & common hepatic area
3. **Focal hypermetabolic** at aortocaval **LN**

## EUS

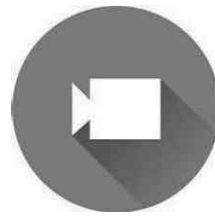


far from the serosa of the stomach : **No gastric invasion**

## Assesement

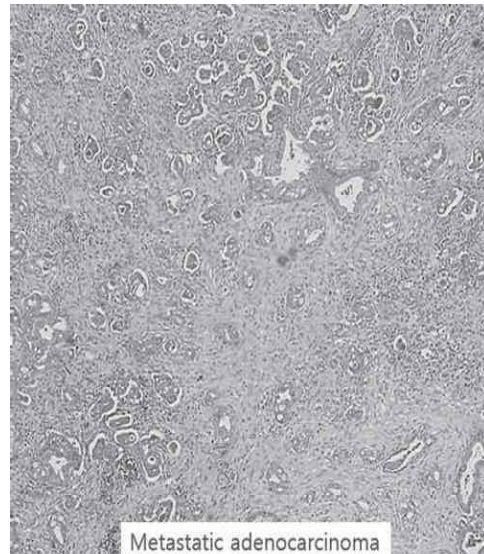
Intrahepatic cholangiocarcinoma at Lt. lobe with multiple L/N metastasis

→ Surgical resection



## Exploration

- Cholecystectomy.
  - Seeding nodule on the Rt. gerota's fascia
  - Seeding nodule on the stomach serosa
- **Frozen biopsy**



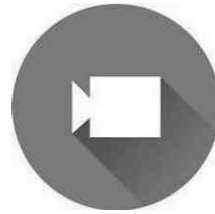
## Exploration

- **Esophageal invasion** was suspected

→ total gastrectomy ?

→ decision to **quit** the operation

→ **palliative chemotherapy**



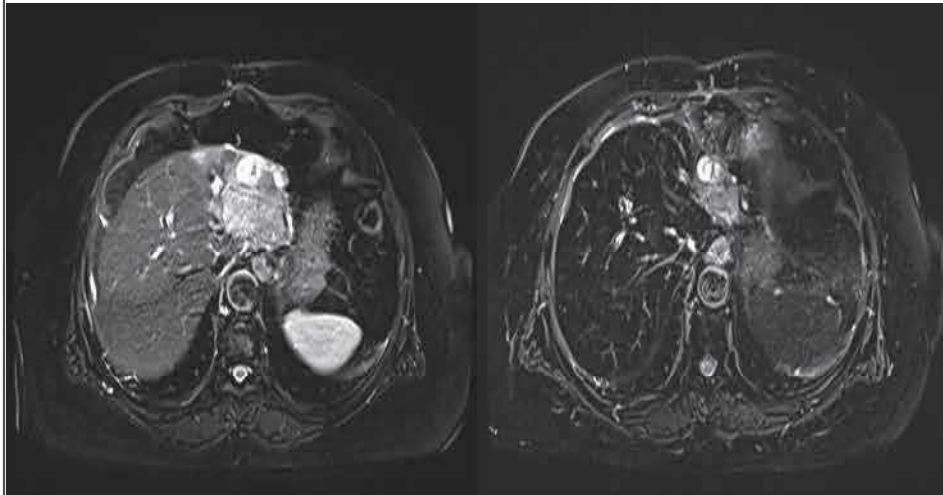
## Palliative chemotherapy

- 1<sup>st</sup> line 1<sup>st</sup>~3<sup>rd</sup> cycle Gemcitabine/Cisplatin (2018.06-08)  
→ F/U CT : **stable disease**
- 1<sup>st</sup> line 4<sup>th</sup> cycle (2018.09)  
→ Hb 8.1, ANC 400, Fever, Cr 1.5 (←0.6)  
→ **Anemia, Neutropenic fever, Azotemia**
- 1<sup>st</sup> line 5-6<sup>th</sup> cycle [**Cisplatin 20% DR**] (2018.10-11)  
→ **Thrombocytopenia**, Anemia (Hb<8, Platelet<50 K)  
→ Neutropenic fever (D15 skip)  
→ F/U CT : **stable disease**

## Palliative chemotherapy

- 1<sup>st</sup> line 7<sup>th</sup> cycle [Cis 20% DR] (2018.12)  
→ Fever d/t UTI, Thrombocytopenia (D8 skip)
- 1<sup>st</sup> line 8<sup>th</sup> cycle [Cis 20% DR] (2019.01)  
→ Pancytopenia (ANC 490, Hb 8.3, PLT 4 K) (D15 skip)  
→ F/U CT : **stable disease / Cr 1.88**
- 1<sup>st</sup> line 9~12<sup>th</sup> cycle [**Gem 20%, Cis 40% DR**] (2019.02-06)  
→ Pancytopenia
- Continue chemotherapy ?

## Liver MRI (18.05 vs 19.07)



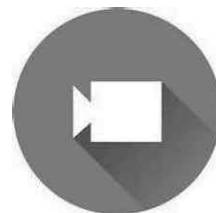
Decreased Lt hepatic mass  
CA19-9 : 6.21→0.6, CEA 6.00→6.02

### Progression note

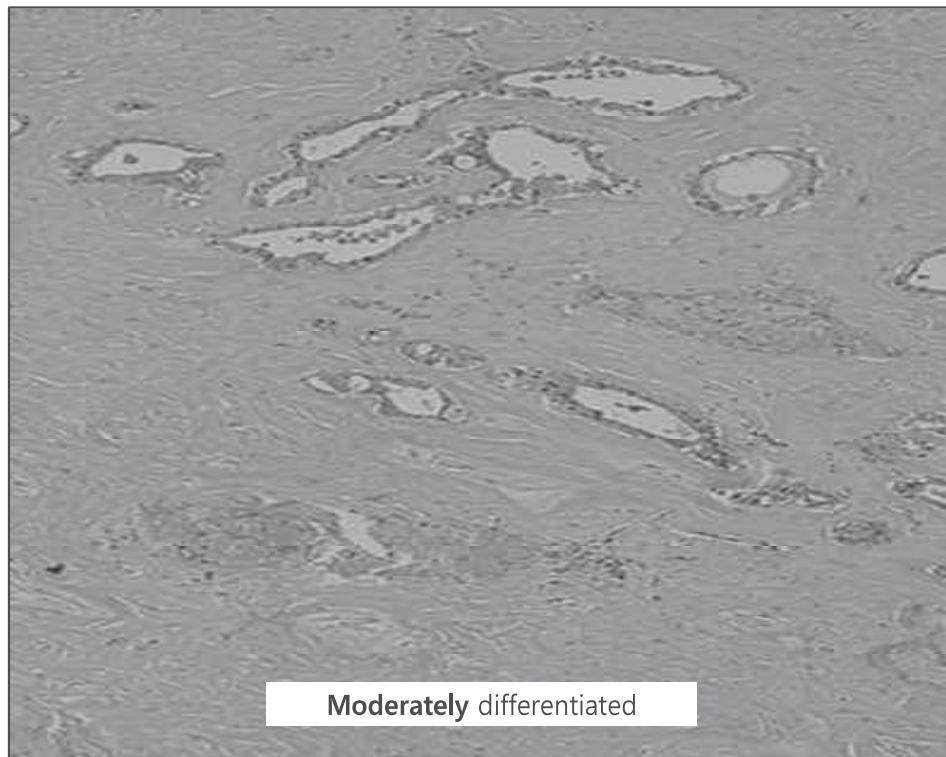
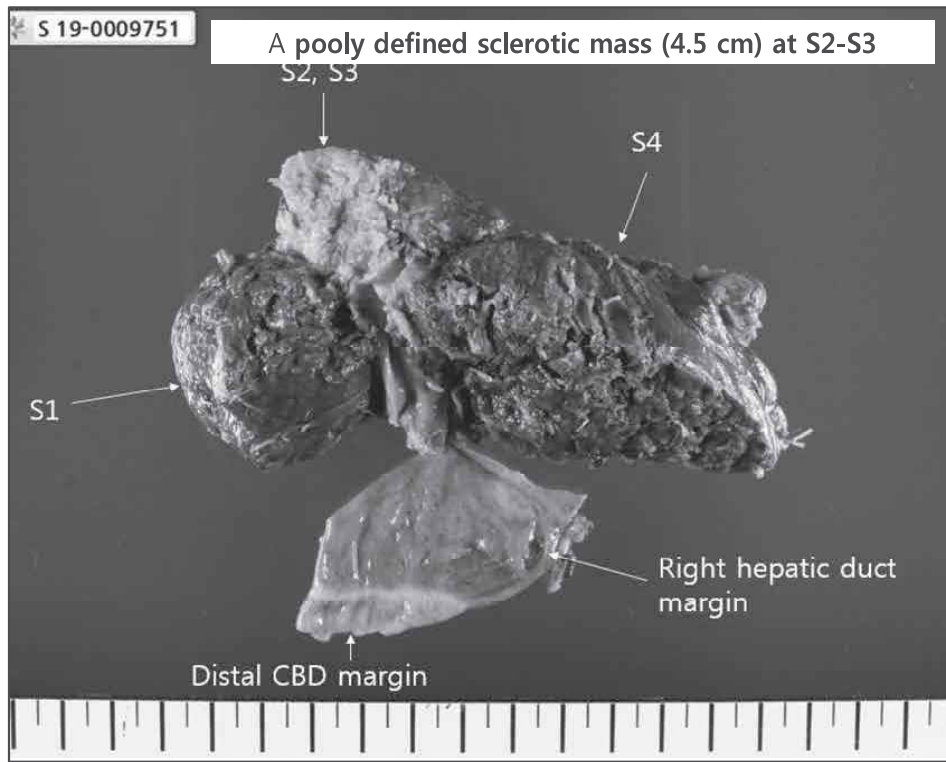
- Repetitive pancytopenia, neutropenic fever, azotemia
  - **difficult to maintain chemotherapy**
  - good performance status
  - recommended **surgical treatment but patient refused**
- 1<sup>st</sup> line 13<sup>th</sup> cycle [Gem 20%, Cis 40% DR] (2019.07)
  - uroseptic shock
- **Curative surgical resection after recovery of cytopenia**

### Operation record

- **Left hepatectomy**
- Bile duct resection
- Lymph node dissection







## Pathologic diagnosis

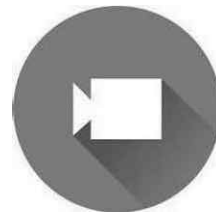
- **Intrahepatic cholangiocarcinoma, moderately differentiated** (post chemotherapy status)
  - 1) Size of tumor: **4.5×3.7×2.0 cm**
  - 2) Number: single
  - 3) Gross type: **mass-forming type**
  - 4) Serosal invasion: peritoneal invasion
  - 5) Direct invasion of adjacent organs: absent
  - 6) Vascular invasion: present
  - 7) Perineural invasion: present
  - 8) Tumor extent: Tumor **perforating visceral peritoneum (pT3)**
  - 9) Surgical margins: free of tumor
  - 10) Lymph node: metastasis in **2/3 regional lymph nodes (pN1)**
  - 12) Tumor regression score: 3 (poor response)
  - 14) AJCC cancer staging (8<sup>th</sup> edition): **ypT3N1**

## Postoperative course

- Stable & Transfer to ICU→GW (POD #2)
  
- Dyspnea (POD #4)
  - Azotemia, Pulmonary edema, Acidosis
  - Elevated inflammatory marker
  - Transfer to ICU care & MV, CCRT
  
- Expire (POD #5)

## Postoperative course

- Blood C&S : *Candida albicans*



## Risk factors of candidemia

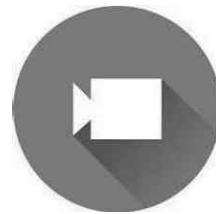
- Patient in ICU
- **Immunocompromised**
- Prior surgery, particularly **abdominal surgery**
- **Previous broad-spectrum antibiotics**
  
- Central venous catheters
- Total parenteral nutrition
- High APACHE scores
- Acute renal failure and/or hemodialysis
- Gastrointestinal tract perforations or leaks
- Trauma/Burn

*Risk factors for albicans and non-albicans candidemia in the intensive care unit. 2008  
Invasive Candidiasis.NEJM 2015*

## Antifungal prophylaxis

- acute leukemia
- myelodysplastic syndromes
- hematopoietic stem cell transplantation

- **Prolonged neutropenia**



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