

A Case of Gastric Large Cell Neuroendocrine Carcinoma with Multiple Liver Metastasis Treated with Hepatic Artery Infusion Chemotherapy Followed by Surgery

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1. Case presentation: A 73 year-old-male was admitted due to multiple liver masses on CT. He underwent surgery due to ampulla of Vater cancer 3 years ago and pathology showed moderately differentiated adenocarcinoma with free resection margin. He had chronic kidney disease. PET-CT revealed multiple FDG uptakes at whole liver.
2. Diagnosis: Gastric large cell neuroendocrine tumor with liver metastasis
3. Therapy and Clinical course: Hepatic artery infusion chemotherapy comprised of 5-FU and cisplatin from day 1 to 4 for every 4 weeks was planned under diagnosis of liver metastasis from ampulla of Vater carcinoma. On day 2 of chemotherapy, he developed gastric ulcer bleeding. After improvement, five cycles of chemotherapy were performed. PET-CT at 4 months revealed no remarkable lesion. EGD at 6 months revealed ulcer scar at angle. PET-CT scan at 1 year revealed disappearance of liver masses but, FDG uptake at stomach and regional lymph nodes was developed. EGD revealed about 2cm sized mass at angle and histology revealed neuroendocrine carcinoma. Wedge resection of the gastric lesion was performed. Pathologic examination revealed large cell neuroendocrine carcinoma with poorly differentiation.
4. Conclusion: This case suggests that hepatic artery infusion chemotherapy may be effective in the treatment of hepatic metastasis of neuroendocrine carcinoma^{1,2}.

Key Words: Neuroendocrine carcinoma; Liver metastasis; Hepatic artery infusion chemotherapy.

REFERENCES

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73 / Male

- Chief complaint
 - General weakness for a few months
- Present illness
 - General weakness for a few months
 - Visited local medical center for evaluation
 - Abdominal CT scan revealed multiple hepatic mass

- Past medical history
- Pyloric preserving pancreatoduodenectomy
 - d/t Ampulla of Vater (AoV) cancer 3 years ago

Pathologic report

Adenocarcinoma, moderately differentiated
with focal duodenal wall invasion
without lymphatic, pancreas and CBD invasion
Resection margin: free of tumor
Lymph node : No abnormality (0/2)

- Chronic kidney disease GFR stage II
- Hypertension - 35 years ago
- Cerebral vascular accident – 10 years ago

- Social history
 - Smoking : No
 - Alcohol intake : Social

- Review of system
 - General weakness (+)
 - Easy fatigue (+)

- Height : 168.7cm, Weight : 65.0 Kg
- Body mass index : 23.03

- Vital signs
 - Blood pressure: 120/70 mmHg
 - Body temperature: 36.5 °C
 - Pulse rate: 76 per min
 - Respiration rate: 19 per min

Impression

- Multiple liver mass
 - r/o Metastasis from previously operated AoV cancer

Plan

- Laboratory examination

- PET scan

- Chemotherapy

Laboratory findings

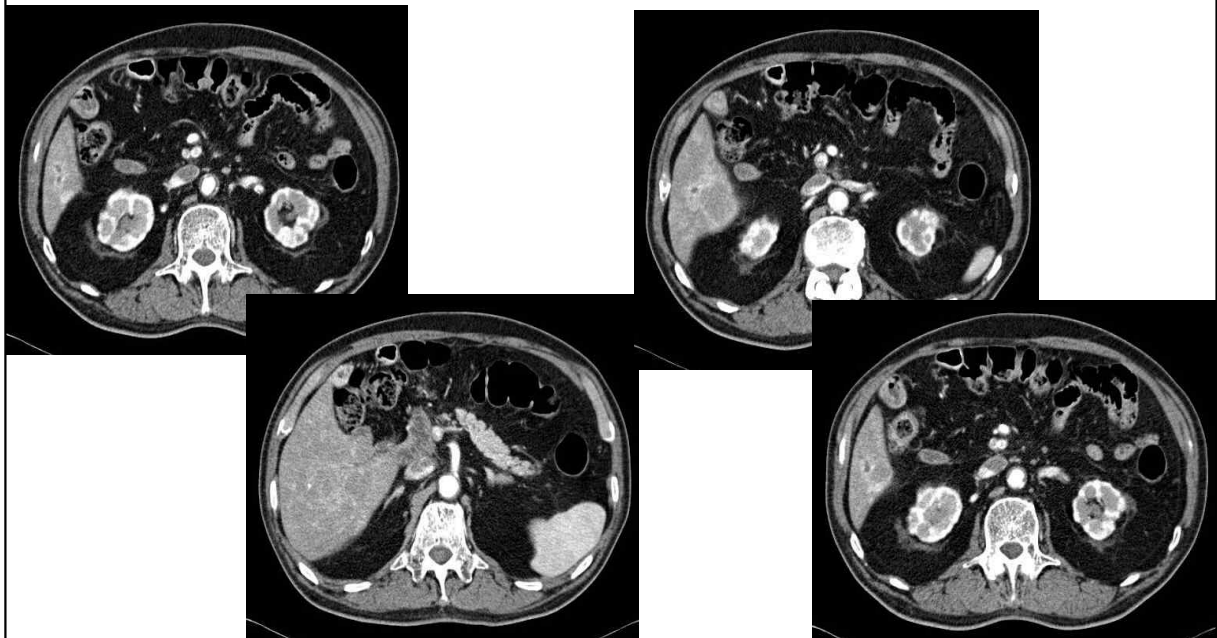
WBC (/uL)	Hb (g/dL)	Plt (/uL)
6,890	11.7	184000

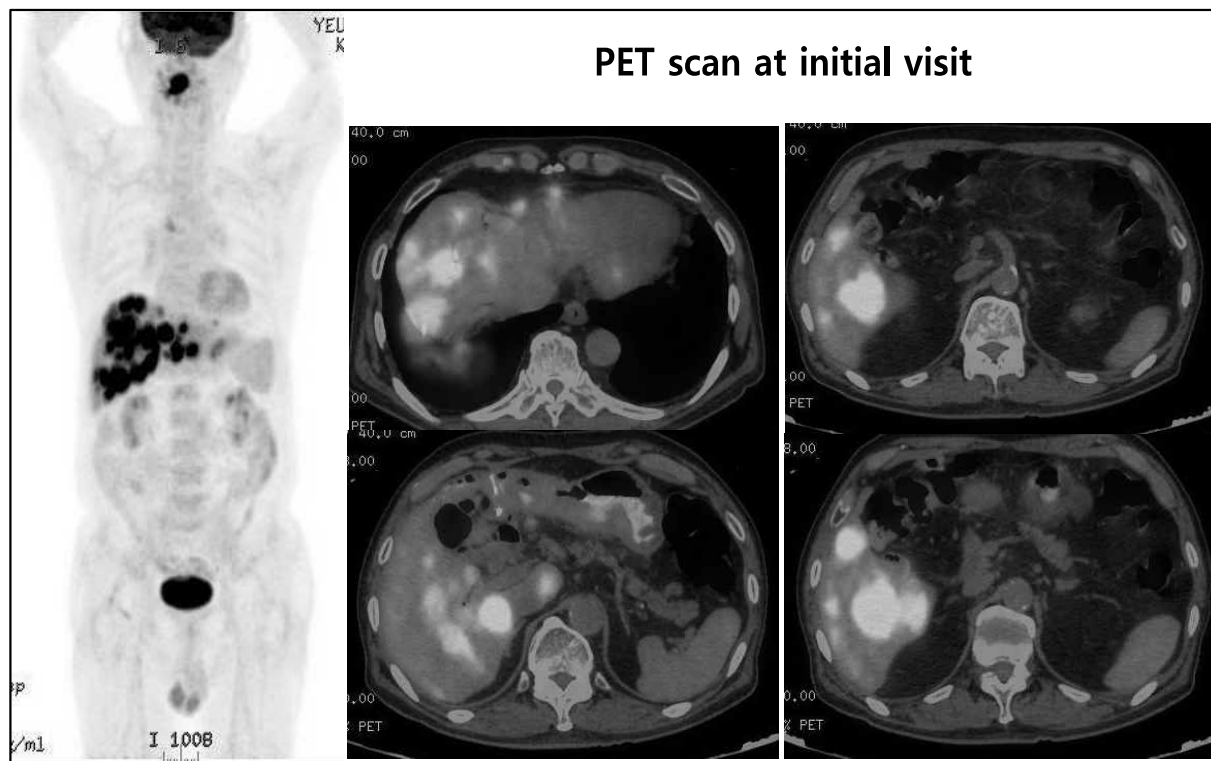
TP	Albumin	T-bil	D-bil	AST	ALT	ALP	GGT	LDH	BUN	Cre
6.14	3.49	0.56	0.15	31	23	255	116	492	49.13	2.1

Tumor marker	
CA19-9 (U/mL)	CEA (ng/mL)
12.42	1.8

Viral hepatitis serology			
HBsAg	HBsAb	HBcAb	Anti-HCV
-	+	+	-

Abdominal CT scan at initial visit

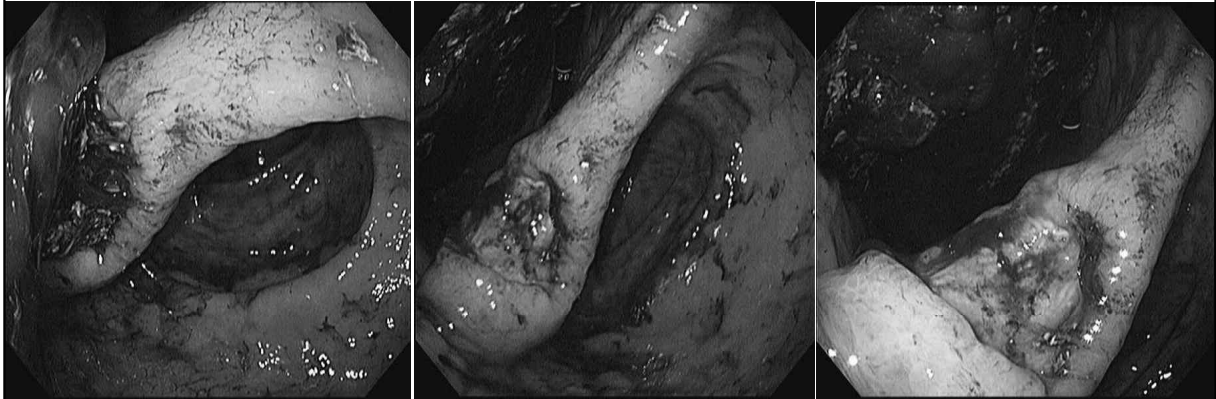




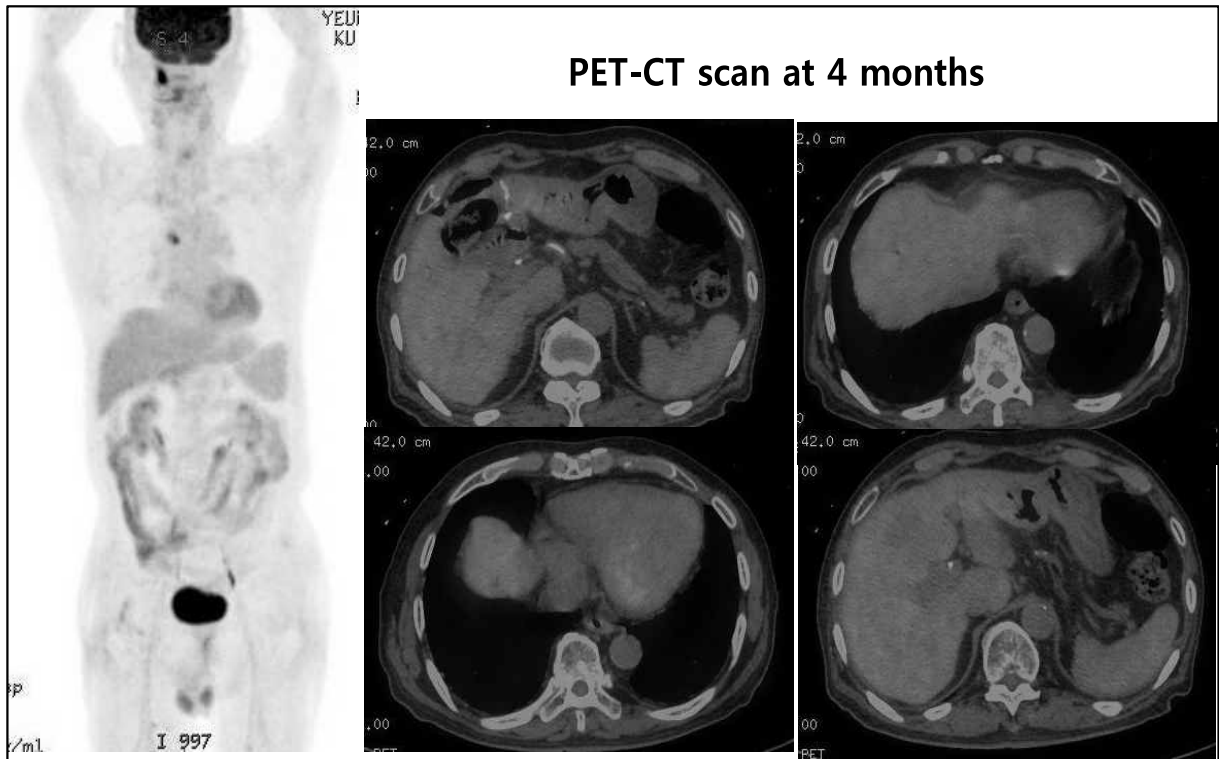
Hepatic artery infusion therapy

- **5-Fluorouracil** 750 mg/m² for 12 hours
- **Cisplatin** 25 mg/m² for 2 hours
- From day 1 to 4
- Repeats every 4 weeks

EGD at the next day of day 1 chemotherapy



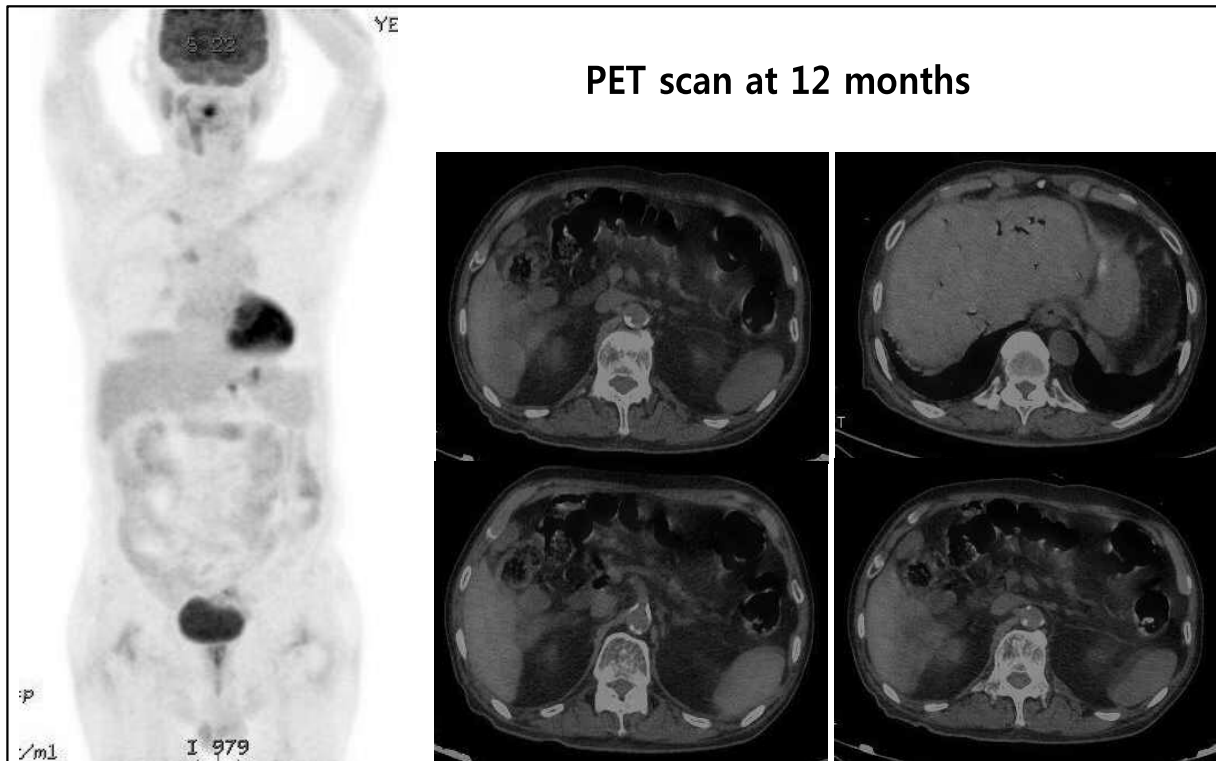
PET-CT scan at 4 months



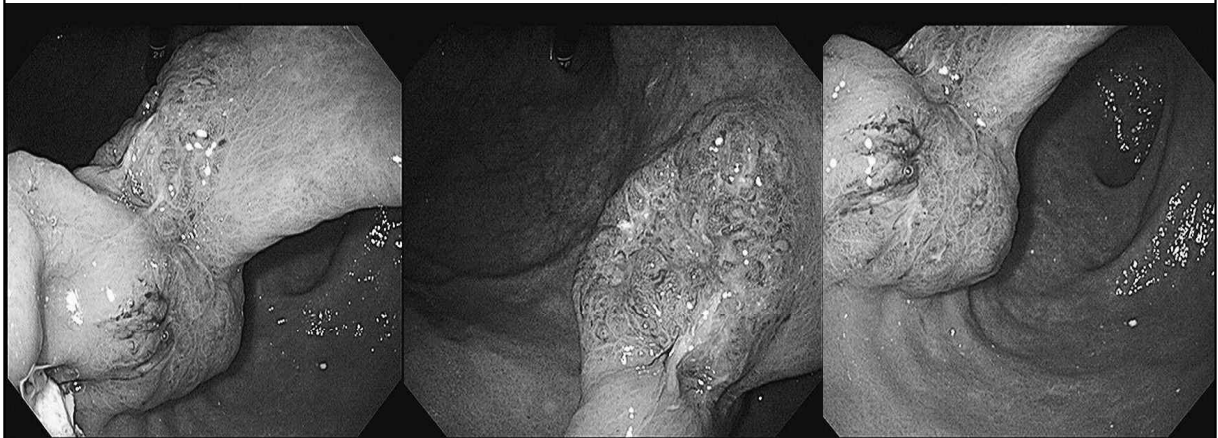
EGD at 6 months



PET scan at 12 months

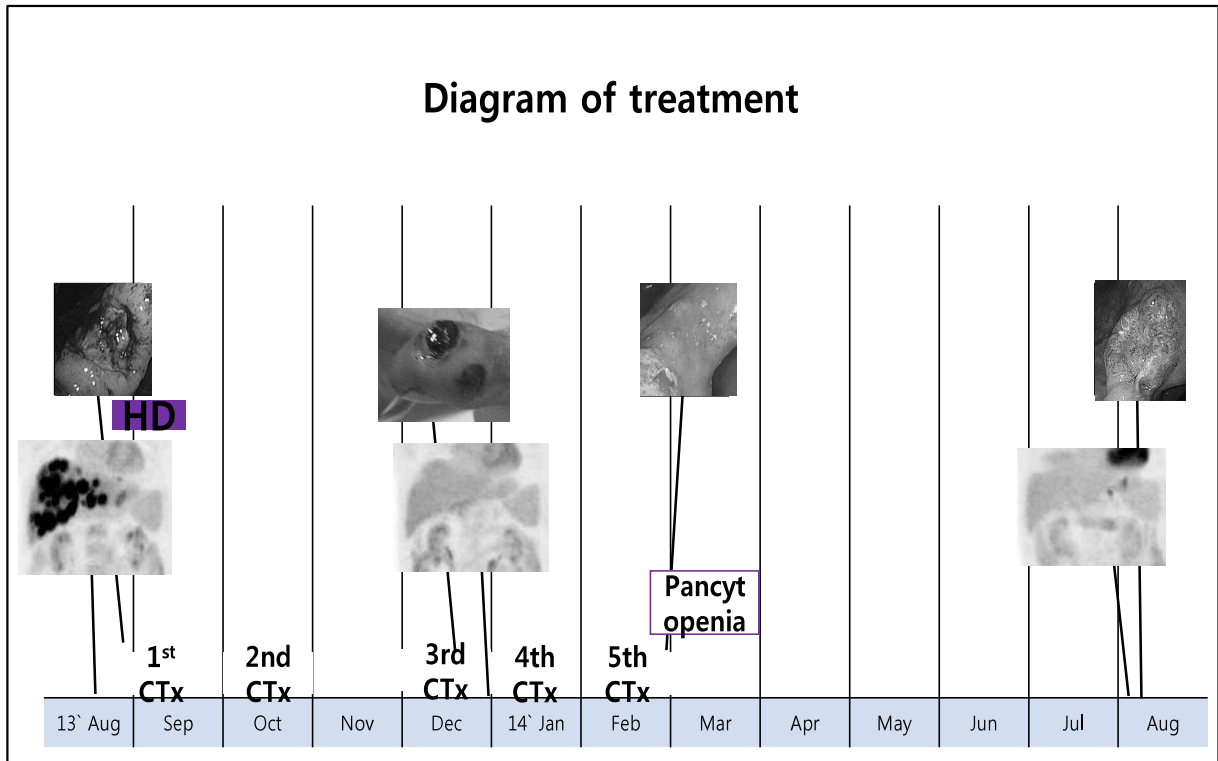


EGD at 12 months



Gross findings of resected specimen





Final diagnosis

Gastric large cell neuroendocrine carcinoma with liver metastasis