Case conference

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Presentor: R2劉邦民
2014.08.13

DAY1 16:35

- 63 y/o female
- Chief complaint: 病人主述為腹痛
- Triage: 3
- T/P/R:37.6/80/18, BP=119/69, SpO2=100%
- Conscious: E4M6V5

Present illness

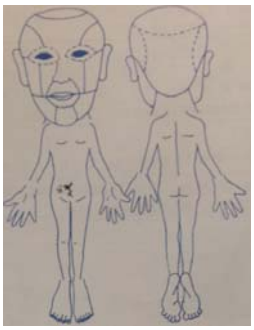
- RLQ abdominal pain since 4天前 night
- 4天前 night 陽明hospital 就醫(fever+ abdominal pain)
  → CT: enteritis
  → iv antibiotic (cefuroxime+ metronidazole)
- DAY1 陽明建議醫學中心就診→ discharge
- 就醫時車搖晃就肚子痛
- 今天沒有再fever, 坐車來新光也比較不痛

Past history

- Allergy: NKA
- Medical history:
  - HTN, old CVA
- Surgical history: NIL

Physical examination

- Cons: Clear
- Chest: clear BS
- abdomen:
  RLQ tenderness
  rebounding tenderness(+)
  no guarding
- Extremity: no leg edema



Impression

- Peritonitis, cause?

Management(1658) 0h23m

- Triage: 3
- NPO
- 上傳外院CT
- WBC/DC, Hb, Platelet
- Na, K, AST, Cr, CRP
- PT/PTT
- B/Cx2
- CXR/KUB
- Cefmetazole 1 gm Q8H+ST IV
- D5S 60 ml/hr

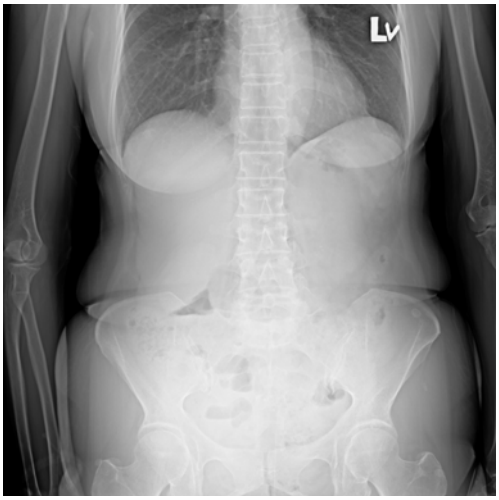
Laboratory data

檢驗項目名稱	檢驗值	檢驗值單位
Hb	11.1	gm/dl
WBC	14.4	x1000/uL
Differential count	**********	
Segmented Neutro.	85.0	%
Lymphocyte	6.0	%
Monocyte	8.0	%
Eosinophil	1.0	%
Basophil	0.0	%
Atypical lymphocyte	0.0	%
Band	0.0	%
檢驗項目名稱	檢驗值	檢驗值單位
Metamyelocyte	0.0	%
Myelocyte	0.0	%
Promyelocyte	0.0	%
Blast	0.0	%
Nucleated RBC	0.0	/100WBC
Platelet	233	x1000/uL

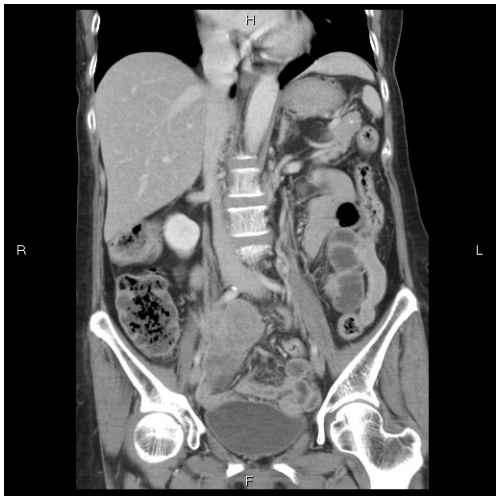
檢驗項目名稱	檢驗值	檢驗值單位
GOT(AST)	17	U/L
Creatinine	0.63	mg/dL
eGFR	95.44	
Na	134	mmol/L
K	4.5	mmol/L
CRP	13.150	mg/dL

檢驗項目名稱	檢驗值	檢驗值單位
PT	13.0	second
Normal control	10.4	second
INR	1.24	Ratio
APTT	32.3	second
Normal control	33.4	second
APTT ratio	0.97	

3天前 KUB



3天前 CT



陽明H 病摘

- Clinical symptoms: lower abdominal dull pain, aggravated with position change, no Nausea, no vomiting
- PE: RLQ and periumbilical tenderness and rebounding pain, mild muscle guarding
- Lab : WBC: 21.09K (4.00-11.00)(Seg:86.4%), CRP:22 (0-10)

陽明H CT 報告

Abdomen & Pelvis CT without/with contrast enhancement shows:
- a lobulated mass, at least 4.4x3.5x5.6cm in size in right lower abdomen seems connecting to the small bowel loop and which showing obvious intraluminal obstruction, a submucosal tumor such as GIST or lymphoma is considered first. Other possibilities include tumors origining from peritonium, mesenchyma, or right adnexa, etc. Suggest clinical correlation.
- multiple small clustered paraaortic lymph nodes.
- fatty strandings of the pelvis and small ascites in pelvis.
- bilateral small renal cysts.
- a small cyst in S4 of liver.
- no evidence of focal lesion in the spleen, pancreas, gallbladder, and bilateral adrenal glands.

IMP:
1. A lobulated mass in right lower abdomen seems connecting to the small bowel loop, a submucosal tumor such as GIST or lymphoma is considered first. Suggest clinical correlation.
2. multiple small clustered paraaortic lymph nodes.
3. fatty strandings of the pelvis and small ascites in pelvis.
Suggest clinical correlation.

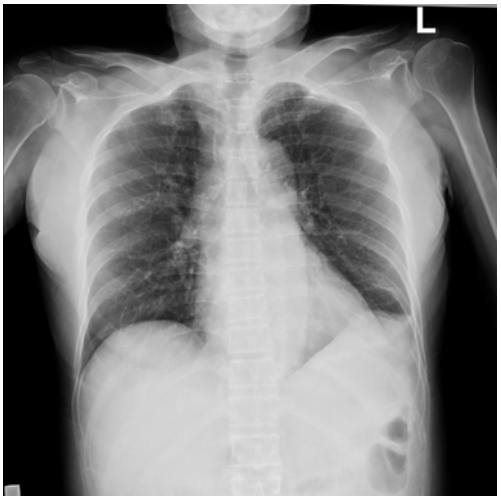
Management(1750)

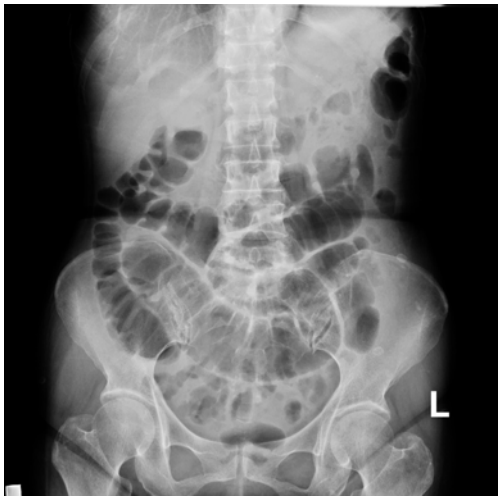
(1750) (1h15m)

- CXR/KUB
- U/A, U/C
- Consult GS doctor

(1908)(2h33m)

- EKG
- Admission
- DC U/A, U/C

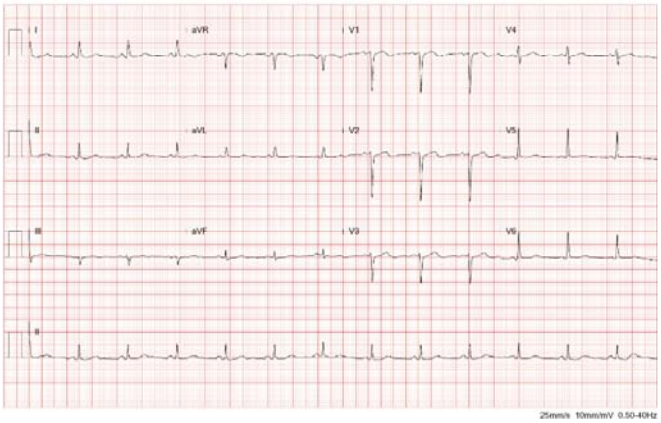




management

(2007)

- Consult GS doctor
- On NG with decompression
- Pre-OP evaluation(CXR, EKG)



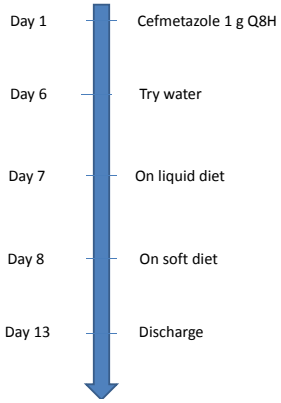
OP finding

- Pre-OP diagnosis : Small bowel GIST
- OP method: resection of small bowel, malignancy, with anastomesis
- Post-OP diagnosis: small bowel tumor with seeding
- OP finding:
  - 8x6x3 cm RUPTURED small bowel tumor at midportion of small bowel with fibrin coated nearby.
    miliary seeding and tumor implant noted at peritoneal cavity

Pathological report

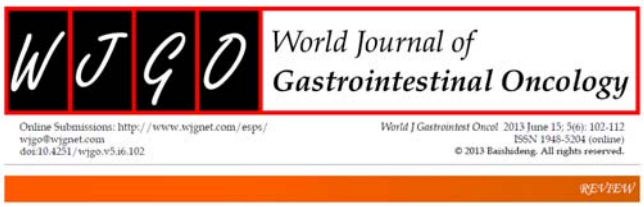
- Intestine, small, jejunum, segmental resection and biopsy --- Gastrointestinal stromal tumor
- Lymph node, mesenteric, biopsy --- Negative for malignancy (0/4)
- Tumor Size: 8.0 x 4.3 x 3.8 cm
- Margins: Negative for GIST
- Pathologic Staging (pTNM):
- TNM Descriptors: None
  - Primary Tumor (pT): pT3 (> 5 cm but not more than 10 cm)
  - Regional Lymph Nodes (pN): pN0
  - Distant Metastasis (pM): Not applicable

Hospitalization course



Discussion

- Gastrointestinal stromal tumor



A gist of gastrointestinal stromal tumors: A review

introduction

- mesenchymal tumors over GI tract(from esophagus to rectum)
  - Stomach:60%, small intestine:30%
  - c-kit mutation, *PDGFRA* mutation, CD117(+)
  - High risk behavior(~30%): metastasis and infiltration to peritoneal cavity and liver, LN invasion: uncommon
- Annual incidence: 11-14/10^6
- 0.1-3.0% GI malignancy
- no predilection for either gender
- Mean age at diagnosis: 60 y/o

Clinical manifestation

- 70% symptomatic
- S/S:
  - Related to site of the tumor
  - Vague s/s: nausea, vomiting, abdominal discomfort, weight loss or early satiety
  - Bleeding (intraluminal or extraluminal)

Diagnostic study

- Contrast enhanced CT scan: modality of choice
- Endoscopic ultrasonography
  - EUS-FNA: sensitivity:82%
- PET: revealing small metastases

Management

- Surgery for localized or potentially resectable GIST
  - Lymphadenoectomy is not required
- Small GIST(< 2cm)
  - Symptomatic: complete resection
  - Asymptomatic+ no high risk EUS feature: endoscopic surveillance at 6 to 12 mo intervals
    - High risk feature: irregular extra-luminal borders, heterogeneous echo patterns, cystic spaces/echogenic foci(+)

imatinib

- Presence and type of KIT or PDGFRA mutation status: reponsive or not
- Neoadjuvant therapy: optimal duration unknown
- Adjuvant therpay: especially in intermediate or high risk of recurrence patient
- Unresectable, metastatic or recurrence
  - Pre-operative therpay → op or tumor progression

Risk of recurrence

Table 3 Risk stratification of gastrointestinal stromal tumors

Mitotic rate	Tumor size (cm)	Stomach	Jejunum/ Ileum	Duodenum	Rectum
≤ 5/50 HPF	≤ 2	None	None	None	None
	> 2, ≤ 5	Very low	Low	Low	Low
	> 5, ≤ 10	Low	Moderate	High	High
	> 10	Moderate	High		
> 5/50 HPF	≤ 2	None	High	NA	High
	> 2, ≤ 5	Moderate	High	High	High
	> 5, ≤ 10	High	High	High	High
	> 10	High	High		

Originated from [54], with permission. HPF: High-power fields; NA: Not available.

Prognosis

- Complete resection: 85%
- recurrence or metastasis following complete resection: 50% (majority within the first 3-5 years)
- Following up: contrast enhanced CT scan every 3-6 month