ER & GS conference

A 26 y/o female,
Abdominal pain for 3 days

Supervisor: VS 連楚明
Presentor: R1劉邦民
102.09.18

Visit ER at 11:59

- Chief complaint: 血便2 天
- Triage: IV
- T/P/R:36.2/88/14, BP=121/86, SpO2=100%
- Conscious: E4M6V5

Present illness

- LLQ cramping pain, ↑ pain with meal
- Loose bloody stool(鮮紅) with increased frequency (not blood-tinged on formed stool)
- No nausea/vomiting
- Fever(-), vaginal bleeding (-), dysuria(-)
- LMP: 3個月前(本來就irregular)

Past history

- Allergy: nil
- Medical history
  - Denied hemorrhoid history
- Surgical history: nil

Physical examination

- Cons: alert
- Head & neck: pink conjunctiva, supple
- Chest: clear breath sounds, regular heart beats
- abdomen: soft, flat, LLQ tenderness (+), rebounding tenderness(+/-)
- Extremity: warm
- neurologic signs: no focal signs

Impression

- Acute abdomen with bloody stool, favor diverticulitis

Management(12:10)

- NPO
- CBC/DC/platelet
- PT/aPTT
- Cr, GOT
- Stool OB, pus cell
- U/A, urine pregnancy test (EIA)
- KUB(after pregnancy test)
- D5S 80 ml/hr

Laboratory data

檢驗項目名稱	檢驗值	檢驗值單位
CBC/Platelet/DC	**********	
WBC	5.5	X1000/ul
RBC	5.26	million
Hb	11.7	gm/dl
Ht	36.0	%
MCV	68.4	fl
MCH	22.2	pg
MCHC	32.5	%
RDW	17.1	%
Platelet	187	x1000/ul

檢驗項目名稱	檢驗值	檢驗值單位
Differential count	**********	
Segmented Neutro.	59.7	%
Lymphocyte	27.7	%
Monocyte	10.8	%
Eosinophil	1.4	%
Basophil	0.4	%

檢驗項目名稱	檢驗值	檢驗值單位
GOT(AST)	14	U/L
Creatinine	0.62	mg/dL
eGFR	116.35	

檢驗項目名稱	檢驗值	檢驗值單位
PT	10.5	second
Normal control	10.2	second
INR	1.03	Ratio
APTT	31.7	second
Normal control	33.3	second
APTT ratio	0.95	

檢驗項目名稱	檢驗值	檢驗值單位
Occult blood (Chem)	4+	
Pus cell	>100	/HPF

Laboratory data

檢驗項目名稱	檢驗值	檢驗值單位
Sediment	**********	
RBC	0-1	/HPF
WBC	5-7	/HPF
Epithelial cell	16-30	/HPF
Cast	Not Found	/LPF
.cast-amount	-	
Crystal	Not Found	/HPF
.Cry-amount	-	
Bacteria	+	
Others	Not Found	

檢驗項目名稱	檢驗值
Pregnancy-EIA	Negative

KUB

Management (15:08)

- Cravit 500 mg IV ST
- Abdominal CT with & without contrast

CT scan

Consult GI doctor(16:12)

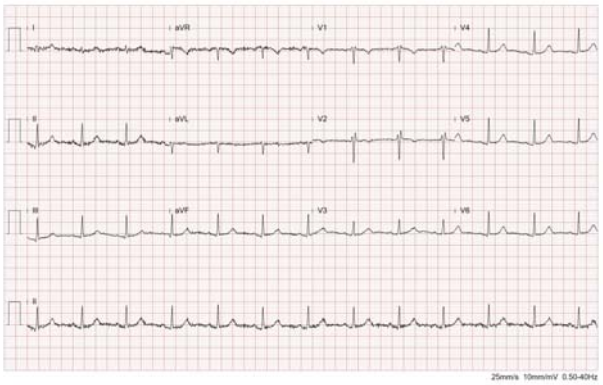
- Agree colorectal mass, nature?

Consult GS doctor(17:18)

- S-colon intussusception r/o colon tumor.
- Arrange laparoscopic LAR
- Check CEA and CA19-9

Management(18:30)

- Check CEA, CA19-9
- Pre-OP evaluation
  - EKG, CXR
  - Na, K, Glucose
- GS admission after OP (18:58)



Laboratory data

檢驗項目名稱	檢驗值	檢驗值單位	最小參考值	最大參考值
CEA	2.0	ng/mL	0	5
CA 19-9	13.4	U/mL	0	35

檢驗項目名稱	檢驗值	檢驗值單位
Glucose	105	mg/dL
Na	138	meq/L
K	3.6	meq/L

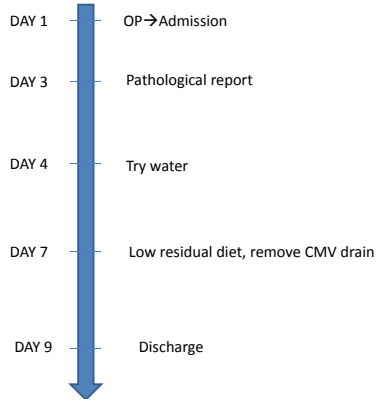
Impression

- Descending colon mass with intussusception

OP finding

- Pre-OP diagnosis : R/O D-colon tumor with intussusception
- OP method: laparoscopic anterior resection
- OP finding:
  - a cauliflower tumor (5x3x3 cm) with stalk located at distal D-colon
  - Intussusception, reduction
- Post-OP diagnosis: D-colon tumor with intussusception

Hospitalization course



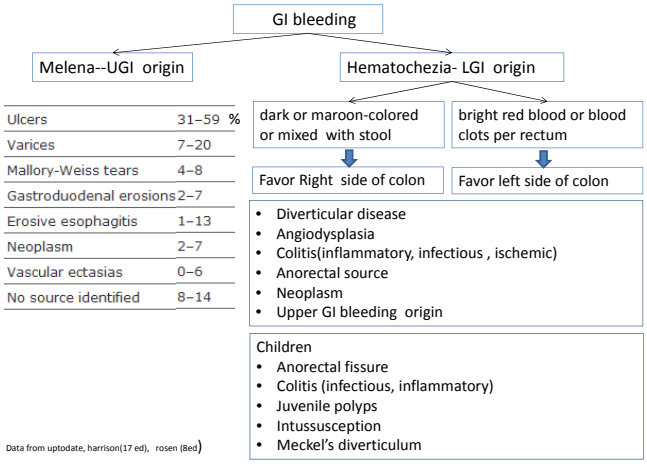
Pathological report

- Pathology: pTisN0Mx, Adenocarcinoma
- Main tumor: polypoid and cauliflower-like tumor with a short stalk, 4.0 x 3.0 x 2.4 cm
- Histologic grade: Moderately differentiated
- Depth of tumor invasion: Invasion of lamina propria
  - LNs: 0/15
  - Lymphovascular Invasion: absent
  - Perineural Invasion: absent

Definite diagnosis

- Focal adenocarcinoma of distal descending colon tumor (pTisN0M0, stage 0) with intussusception status post laparoscopic anterior resection on DAY 2

Discussion



GASTROENTEROLOGY

Adult intussusception in Asians: Clinical presentations, diagnosis, and treatment

Chun-Chao Chang,*,† Yang-Yuan Chen,†,‡ Yung-Fa Chen,‖ Chun-Nan Lin¶ and Hsu-Heng Yen,† Horng-Yuan Lou*

*Division of Gastroenterology, Department of Internal Medicine, Taipei Medical University Hospital and Digestive Disease Research Center, Taipei Medical University, †Taipei Medical University Wan-Fang Hospital, and ‡Zhongxiao Branch, Taipei City Hospital, Taipei, and ¶Changhua Christian Hospital, Changhua, Taiwan

Epideminology

- 5% of all cases of intussusception
- 1-5% of intestinal obstruction
- 90% of cases are secondary to a pathological condition (lead point)
  - Polyp, diverticulum, stricture, neoplasm
  - 40% caused by primary or secondary malignancy
- Surgical resection rather than penumatic or hydrostatic reduction

Table 1 Demographic data of patients with intestinal intussusception

Characteristic	*n*
Total patients	46
Mean age (years) (range)	58.2 (19–83)
Sex (male: female)	28:18
Enteric	
Benign	22
Malignant	3
Colonic	
Benign	13
Malignant	8

Table 2 Symptoms and signs of patients with intussusception ($n = 46$)

Symptoms and signs		*n* (%)
Nausea/vomiting	Enteric: 15/25. colonic: 9/21	24 (52.2)
Abdominal pain		46 (100)
Constipation/diarrhea		8 (17.4)
Bloody stool	Enteric: 1/25. colonic: 7/21	8 (17.4)
Coffee-ground vomitus		2 (4.3)
Fever/chills		3 (6.5)

- Mean duration: 13.5 days(1-90 days)
  - 25/46: acute symptom < 3 days, 21/46 symptoms > 7 days
  - Benign vs. malignant : 16.1 vs 5.2
  - Enteric vs. colonic : 20.1 vs 5.1

Table 3 Preoperative diagnostic studies

Investigation	No. performed	No. suggestive of intussusception	Accuracy (%)
Plain X-ray of the abdomen	37	0	0
Abdominal sonography	28	18	64.3
Abdominal computed tomography	35	31	88.6
Colonoscopy	11	6	54.6
Small-bowel series	5	3	60.0

Table 4 Etiology of intestinal intussusceptions

Etiology	Enteric ($n = 25$)	Colonic ($n = 21$)
Benign		
Idiopathic	5	2
Postoperative adhesion band	1	0
Diverticulum	1	0
Appendical inflammation	0	1
Inflammatory polyp	1	2
Hyperplastic polyp	0	1
Mesentery lymph node	1	0
Granuloma	1	0
Neurofibroma	1	0
Gastrointestinal stromal tumor	2	0
Hamartoma	3	1
Lipoma	6	6
Malignant		
Metastatic adenocarcinoma	1	4
Lymphoma	1	4
Leiomyosarcoma	1	0

Discussion

- Optimal treatment : no mandatory
  - operative reduction (25/46) (risk of tumor seeding)
    - Enteric: 19, colonic: 6
    - Benign: 20, malignant: 5
    - Stop maneuver if severe bowel ischemia or risk of perforation
  - resection of bowel segment was recommended
- 8 patient dead during following-up
  - 3 : malignant lymphoma, 2: adenocarcinoma, 1: heart failure
  - Postoperative complication(2): sepsis ; penumonia

Conclusion

- Most intussusception was benign
- Most sensitive diagnose modality: abdominal CT
- Operative reduction was recommended for enteric intussusception but not for colonic origin
- The prognosis was good except in case of malingancy

Table 3 Etiologies of the 44 AIs

		Enteric	Ileocolic	Colocolonic	Sigmoidorectal	Percentage
Tumor	Malignant	6	3	3	0	27.3 (12/44)
	Borderline	1	0	0	0	2.3 (1/44)
	Benign	4	3	3	1	25.0 (11/44)
Nontumorous polyp		1	2	1	0	9.1 (4/44)
Intestinal inflammatory disease		2	3	0	0	11.4 (5/44)
Anatomy abnormality		0	2	0	0	4.5 (2/44)
Iatrogenic		4	1	0	0	11.4 (5/44)
Idiopathic		2	1	1	0	9.1 (4/44)
Percentage		45.5 (20/44)	34.1 (15/44)	18.2 (8/44)	2.3 (1/44)	100.0 (44/44)

World J Gastroenterol 2009 July 14; 15(26): 3303-3308

Diagnosis of Colon Cancer Differs in Younger versus Older Patients despite Similar Complaints

Offir Ben-Ishay MD[1], Eran Brauner MD[1], Zvi Peled MD[1], Amira Othman RN[1], Benjamin Person MD[1,2] and Yoram Kluger MD FACS[1]

[1]Department of General Surgery and [2]Division of Colorectal Surgery, Rambam Health Care Campus, affiliated with Rappaport Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel

IMAJ VOL.15, JUNE 2013

Method

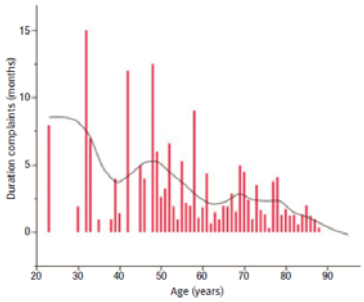
- Retrospective study
- 2000-2009
- Department of general surgery at Rambam health campus, Haifa
- Proven diagnosis of colon cancer
- Exclusion: rectal or sigmoid cancer

→ 236 patient

Table 2. Comparison of characteristics and symptoms between the two age groups

	Group 1 < 50 yr (n=31)	Group 2 ≥ 50 yrs (n=205)	*P* value
Age (yr)	41.4 ± 7	71.9 ± 10.2	0.0001
Male gender (%)	48.4	53.7	0.7
Side of malignancy (left) (%)	47.9	71.0	0.14
Pain (%)	64.5	49.3	0.13
Diarrhea (%)	16.1	10.2	0.35
Constipation (%)	29.0	29.3	1.00
Vomiting (%)	19.4	10.2	0.14
Weight loss (%)	29.0	33.2	0.84
Rectal bleeding (%)	25.8	19.0	0.47
Melena (%)	0.0	3.4	0.60
Change in bowel habits (%)	51.6	40.0	0.24
Duration of complaints (mon)	5.3	2.4	0.002
Overall survival (%)	58.1	61.0	0.84

Duration of complain prior to diangosis



- Mean duration : 5.3 vs 2.4 months (P=0.002)

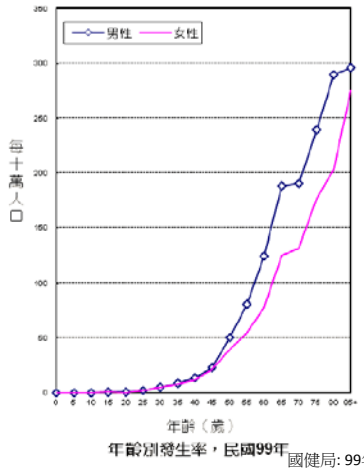
Table 3. Pathological staging in the two groups

Stage % (n)	Group 1 (n=31)	Group 2 (n=205)	*P* value
1	3.2 (1)	15.6 (32)	0.06
2a	29.0 (9)	29.3 (60)	0.85
2b	3.2 (1)	1.0 (2)	0.34
3a	0.0 (0)	4.9 (10)	0.37
3b	12.9 (4)	14.1 (29)	1.00
3c	12.9 (4)	10.24 (21)	0.75
4	38.7 (12)	21.5 (44)	0.035

- Survival curve of two group (log rank test): no difference(p=0.92)

Conclusion

- It seem to younger patient are more often diagnosed late, at advance stage
- Alertness to patient's complaint, together with evaluation regardless with of age but according to symptoms and clinical presentation was crucial
- Large-scale population-based studies are need to confirm this trend



年齡別發生率，民國99年 國健局: 99年癌症登記報告

年齡	性別		
	男性	女性	合計
00-04 歲	0	0	0
05-09 歲	0	0	0
10-14 歲	0	0	0
15-19 歲	0	1	1
20-24 歲	5	2	7
25-29 歲	6	8	14
30-34 歲	27	18	45
35-39 歲	56	37	93
40-44 歲	80	56	136

年齡	性別		
	男性	女性	合計
45-49 歲	183	124	307
50-54 歲	292	217	509
55-59 歲	415	250	665
60-64 歲	409	223	632
65-69 歲	434	257	691
70-74 歲	374	236	610
75-79 歲	321	208	529
80-84 歲	237	170	407
85 歲以上	138	122	260
合計	2977	1929	4906

國健局: 99年癌症登記報告