第三節 腹痛(Abdominal pain)

腸胃內科 曾國枝醫師

A.Type: separated into three categories

a. Visceral pain:

- 1. Felt at the primary stimulation
- 2. Usually dull, aching and poor localized
- 3. Difficult to describe

b. Parietal pain:

- 1. Deep somatic pain that arises from irritation or inflammation of parietal peritoneum or root of mesentery
- 2. Easy define and describe than visceral pain

c. Referred pain:

- 1. Pain felt at a site other than that stimulated
- 2. In an area supplied by the same or adjacent neural segment

**** Location of pain from specific organs****

Organ	Location
Esophagus	Substernal;occasionally neck,jaw,arm,or back
Stomach	Epigastrium;occasionally left upper quadrant and
	back
Duodenal bulb	Epigastrium;occasionally right upper quadrant and
	back
Small intestine	Periumbilical; occasionally above the lesion
Colon	Below umbilicus, on the side of the lesion
Splenic flexure	Left upper quadrant
Rectosigmoid	Suprapubic region
Rectum	Posteriorly, over the sacrum
Pancreas	Epigastrium or back
Liver and gallbladder	Right upper quadrant, right shoulder, and posterior
	chest

B. Acute abdominal pain

The most common causes are acute gastroenteritis, inflammatory disease (appendicitis, cholecystitis, diverticulitis, pancreatitis, salpingitis)

**** Some important causes of abdominal pain****

I. Pain originating in the abdomen

A.Parietal peritoneal inflammation

- 1.Bacterial contamination(e.g.,perforated appendix,pelvic inflammatory disease)
 - 2. Chemixal irritation(e.g.,perforated ulcer,pancreatitis,mittelschmerz)
 - B.Mechanical obstruction of hollow viscera
 - 1. Obstruction of the small or large intestine
 - 2. Obstruction of the biliary tree
 - 3. Obstruction of the ureter
 - C. Vascular disturbances
 - 1.Embolism or thrombosis causing intestinal ischemia
 - 2. Nonocclusive intestinal ischemia
 - 3. Rupture of an abdominal aortic aneurysm
 - 4. Sickle cell anemia
 - D.Abdominal wall disorders
 - 1. Distortion or traction of mesentery
 - 2. Trauma or infection of muscles
 - 3. Distention of visceral surfaces(e.g., hepatic or renal capsules)

II. Pain referred from extraabdominal sources

- A.Thorax(e.g.,pneumonia,referred pain from coronary occlusion)
- B.Spine(e.g.,radiculitis from arthritis)
- C.Genitalia(e.g.,torsion of the testicle)

III. Metabolic causes

- A.Exogenous
 - 1.Black widow spider bite
 - 2.Lead and other poisoning
- **B.**Endogenous
 - 1.Uremia
 - 2. Diabetic ketoacidosis
 - 3. Porphyria
 - 4. Allergix factors (C'1-esterase deficiency)

IV . Neurogenix causes

A.Organic

- 1. Tabes dorsalis
- 2.Herpes zoster
- 3.Causalgia
- **B.**Functional

a. Clinical features:

1. Acute gastroenteritis

- i) anorexia, nausea, vomiting (common)
- ii) crampy, rather poorly localized abdominal pain and tenderness
- iii) diarrhea(common)
- iv) fever and leukocytosis (common)

2. Acute appendicitis

- i) perforation is uncommon before 24-36 hours from onset of symptom; initially pain is diffuse epigastric or periumbilical, eventually shifting to RLQ
- ii) nausea and acute loss of appetite
- iii) tenderness, muscle spasm, and rebounding tenderness over RLQ are frequently absent at the onset, but become more evident after24 hours
- iv) fever is slight to moderate, esp during first 12 hours
- v) leukocytosis with neutrophilia is a late finding

3. Acute cholecystitis

- i) previous history of fatty food intolerance, flatulence, postprandial fullness and RUQ discomfort (common, but less specific)
- ii) Steady and severe pain in RUQ or epigastrium
- iii) Tenderness, muscle guarding and rebounding pain (common)
- iv) Anorexia, nausea and vomiting (common)
- v) Fever and leukocytosis (common)
- vi) Mild hyperbilirubinemia

4. Acute diverticulitis

- i) lower abdominal pain, esp LLQ (common)
- ii) Tenderness, muscle guarding and rebounding pain (common)
- iii) Fever and leukocytosis (common)
- iv) Constipation (common)
- v) Nausea and sometimes vomiting (common)
- vi) Finding like those of acute appendicitis, but L't sided

5. Acute pancreatitis

- i) three causes: alcohol, cholelithiasis and hyperlipidemia
- ii) variable abdominal pain, from mild to severe, typically

- epigastric pain radiated to back; possible accompany with shock
- iii) nausea and vomiting (common)
- iv) Fever and leukocytosis (common)
- v) Elevated amylase and lipase

6. Acute intestinal obstruction

- i) depend on location of obstruction
- ii) usually abdominal pain, vomiting and distension
- iii) X-ray can give clue

7. Perforated viscus

- i) most common produced by perforated of peptic ulcer
- ii) sudden onset of severe abdominal pain , aggravated by movement
- iii) tenderness, rigidity and rebounding pain
- iv) Free air below diaphragm by X-ray
- v) Shock (commom)

8. Mesenteric vascular infarction (ischemia bowel dx)

- i) moderate to severe abdominal pain
- ii) vomiting or bloody diarrhea (inconstant)
- iii) abdominal distension, pain and rigidity in severe cases
- iv) Hypotension and shock in severe cases

9. Acute salpingitis

- i) lower abdominal pain
- ii) fever and chillness
- iii) Hx of sexual exposure
- iv) Vaginal discharge and adnexal mass by echo

Chronic and recurrent abdominal pain

- 1. Peptic ulcer disease:
- 2. Biliary tract disease
- 3. Pancreatic disease
- 4. Small intestinal disease
- 5. Irritable bowel disease
- 6. Colon cancer

^{**} pain present for weeks or months, think below disease

7. Other causes:

- i) Chronic diverticulitis
- ii) Intermittent intestinal obstruction
- iii) Tuberculosis peritonitis
- iv) Systemic disease and intoxication (such as, connective tissue disease, DM, lead intoxication ..)
- v) Pancreatic cancer

^{***} Adapted from Problem-Oriented Medical Diagnosis***