Abdominal Complaints in Urgent & Emergency Care

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Assessment of Abdominal Complaints in Urgent or Emergency care

- Understand the key aspects of history taking that may indicate an emergency abdominal complaint that requires referral.
- Recognise signs and symptoms of common medical and surgical causes of abdominal pain.
- Understand the importance of and the key factors in abdominal examination in the urgent care setting.
- Appreciate how to examine the abdomen for signs of emergency and urgent causes of abdominal pain.
- Understand the significance of special abdominal exam techniques and know how to examine for:
  - Rovsings sign
  - Murphys sign
  - Psoas sign
  - Obturator sign
- Manage common minor abdominal complaints that lead to patients presenting for urgent care.
Abdominal Ailments - What could it be?

- Gastroenteritis- Beware in elderly
- UTI
- Constipation
- Biliary colic
- Renal colic
- Pyelonephritis
- Irritable bowel syndrome
- Diverticulitis
- Haemorrhoids
- Mesenteric adenitis- young children age 6-11
Red flags

• Acute abdomen-

• Appendicitis
• Peptic ulcer disease- GI bleed
• Abdominal aneurysm
• Strangulated hernia
• Torsion testes/Ruptured Ovarian cyst
• Bowel Obstruction
• Malignancy

• Pancreatitis
• Diabetic Ketoacidosis

• AGE
• Older- mesenteric ischaemia/emboli, perforation-GI bleed
• Infant: volvulus, Child-intersussception
ASSESSMENT

- Vital signs- Unwell or well
- Well elicited history
- Proper physical examination

Diagnosis can be made most of the time by a good history and a proper physical examination.
History of the S&S

- **Pain** OPQRST)
- **Onset**
- **Palliative and precipitating** (aggravating) factors- progression of pain i.e poorly localised to sharp & better localised beware involvement parietal peritoneum
- **Quality**, **Location**, **Radiation** (e.g. back, shoulder, groin)
- **Sudden or gradual**, **Severity**, any similar episodes
- **Symptoms associated** e.g. melaena, urinary, dyspnoea, chest pain, fever, chills, sweating
- **Timing**
- **Change in nature of Pain**

- Pain first then N&V- **SURGICAL** The vomiting is due to ‘reflex pylorospasm
- N&V then pain- **MEDICAL**
History of S&S

- AMPLE
- Allergies
- PMH: Diabetes, AF, CHD, previous abdominal surgery
- Medication: NSAIDS, corticosteroids, anticoagulants
- Last ate
- Fever & chills
- D&V
- Rectal bleeding
- Weight loss
- Associated bowel or urinary symptoms

- Menstrual History in females - (i) Missed period- ectopic pregnancy
  (ii) Mid of period-ovulation pain (Mittel- schmerz), (iii) With heavy periods- endometriosis

- Family history of colon cancer, any other malignancy or inflammatory bowel disease
DRUG HISTORY

- Corticosteroids – mask pain
- Anticoagulants – can lead to an intramural haematoma of the gut causing obstruction
- Oral Contraceptives - rupture of hepatic adenomas
- NSAIDs - erosive gastritis & peptic ulcers
Acute Abdomen

- Challenge to Surgeons & Physicians
- Most common cause of surgical emergency admission
- Clinical course can vary from minutes to hours to weeks.
- It can be an acute exacerbation of a chronic problem e.g. Chronic Pancreatitis, Vascular Insufficiency.
DEFINITION

• Acute Abdomen is a term used synonymously for a condition that needs immediate surgical intervention
Physical Examination

General Appearance

a. Anxious Patient lying motionless:
   (i) Acute appendicitis
   (ii) Peritonitis

b. Rolling in bed & restless:
   (i) Ureteric Colic
   (ii) Intestinal colic

c. Writhing in Pain: Not always in elderly
   Mesenteric Ischemia
Physical Examination (contd.)

d. Bending Forward:
   Chronic Pancreatitis

e. Jaundiced:
   CBD obstruction

f. Dehydrated
   (i) Peritonitis
   (ii) Small Bowel obstruction
Physical Examination
(contd.)

Low grade temp. is seen with
- Appendicitis
- Acute cholecystitis

High grade temp. is seen with
- Salpingitis
- Abscess

Very High Grade Temp. with increasing lethargy seen in
imminent septic shock
- Peritonitis
- Acute cholangitis
- Pyonephrosis
Systemic Examination

Cardiopulmonary examination

Check for:

- Possible MI
- Basal Pneumonia
- Pleural Effusion
Systemic Examination

Inspection

- Scaphoid or flat in peptic ulcer
- Distended in ascites or intestinal obstruction
- Visible peristalsis in a thin or malnourished patient (with obstruction)

• NB hard enlarged left supraclavicular nodes= troisiers sign=gastric CA
Systemic Examination

• Erythema or discolouration
  a. Peri-umbilical - Cullen sign
  b. Inguinal – Fox sign
  c. Flanks - Grey Turner sign

Seen in Hemorrhagic pancreatitis
or any other cause of haemoperitoneum

• Any Visible masses
• Any visible cough impulse at hernia site
Percussion & auscultation

- Do first so as to identify changes re percussion note can alter on movement when palpate
- Bowel sounds
- Borborygmi- increased peristalsis, vigorous load noises- IBS
- None- adynamic ileus or advanced bowel obstruction
- High pitched- early bowel obstruction
- Tinkling- just prior to bowel obstruction
Systemic Examination

Palpation

- Be gentle
- Start away from site of pathology then towards
- Check for Hernia sites
- Tenderness
- Rebound tenderness
- Guarding- involuntary spasm of muscles during palpation
- Rigidity- when abdominal muscles are tense & board-like. Indicates peritonitis.
Systemic Examination

Per Rectal Examination: Must be performed as often when not done-associated with misdiagnosis

- tenderness
- induration
- mass (Blummer’s shelf)
- frank blood
Medico Legal pitfalls

• Relying on classical presentation descriptions when diagnosing acute abdomen.
• Relying on presence of leukocytosis or fever as sign of infection
• Diagnosing gastroenteritis or constipation
• Allow patient to be admitted to wrong service e.g. medical when surgical diagnosis
Assessment Findings

- Rovsing - press on left lower quadrant, pain on right lower quadrant (McBuneys point) intensified.

- Cullen/Grey Turner - echymosis

- Murphy sign: Abrupt cessation of inspiration when palpate right hypochondrium (gall bladder)

- Markle (Heel jar) - stand with straightened knees, raise to tip toe, relax put heels back to floor - pain if peritoneal irritation/appendicitis

- Romberg-Howship - Pain down medial aspect of thigh to knee or down leg (Strangulated obturator hernia caused by nerve compression)
Obturator Sign

Raise right leg and internally rotate hip—pain? appendicitis. For **Psoas** lift thigh against hand placed just above knee no internal rotation, pain indicates irritation of muscle by inflamed retrocecal appendix.
the psoas sign is an indicator of irritation to the iliopsoas group of hip flexors in the abdomen.

Passively extend the thigh of a patient with knees extended. In other words, the patient is positioned on his/her left side, and the right leg is extended behind the patient. If pain in abdomen-positive psoas sign.

Because the right iliopsoas muscle lies under the appendix when the patient is supine, a "positive psoas sign" may suggest appendicitis.
Investigations

Investigations are usually carried out:

- only to support the diagnosis.
- or to narrow down the differential diagnoses.
- Blood tests: FBC & ESR, LFT, U&E, C-reactive protein, Electrolyte, Amylase
- WBC - beware in elderly not always raised wbc or pyrexial in appendicitis etc
Radiology

Upright X ray chest for
- Basal Pneumonia
- Ruptured Oesophagus
- Elevated Hemi diaphragm
- Free Gas under diaphragm
References


• Ng, C, Squires T and Busuttil A (2007) Acute abdomen as a cause of death in sudden, unexpected deaths in the elderly, Scottish Medical Journal, 52( 1) February: 20-23