Approach to the patient with abdominal pain

0

Example Cases – Spot diagnosis

 3 year old boy – diffuse abdomen pain which later localises to RIF

- 42 year old female Colicky epigastric pain which radiates to RH and R shoulder (5Fs)
- 58 year old man Epigastric pain with nausea and vomiting

Abdominal pain – Why is it important?

- Very common
- We will encounter patients with abdominal pain in all specialties
- Approx 6% of A+E visits due to abdominal pain – varies with population (65% in high risk elderly)
- Very important to rule out emergency cases

Different types of abdominal pain?

- Viseral Pain arising from internal organs
 - Crampy, achy, diffuse pain poorly localised
- Somatic Pain arising from body surface or musculoskeletal tissues
 - Sharp, stabbing pain well localised
- Referred –overlap of fibers from other areas
 - Distant from site of generation, symptoms but no signs

Common causes of abdominal pain in different age groups

Table 9.3 Causes of abdominal pain by age of onset

Birth to 1 year	2–5 years	6–11 years	12–18 years
Constipation Gastroenteritis Hirschsprung's disease Incarcerated hernia Infantile colic Intussuception UTI Volvulus	Appendicitis Constipation Gastroenteritis Henoch–Schönlein purpura Intussuception Pharyngitis Sickle cell crisis Trauma UTI Volvulus	Appendicitis Constipation Functional pain Gastroenteritis Henoch–Schönlein purpura Mesenteric lymphadenitis Pharyngitis Pneumonia Sickle cell crisis Trauma UTI	Appendicitis Constipation Dysmenorrhea Ectopic pregnancy Gastroenteritis Mittelschmerz Ovarian torsion PID Testicular torsion Threatened abortion

PID: pelvic inflammatory disease; UTI: urinary tract infection.

Adapted from Leung AKC, Sigalet DL. Acute abdominal pain in children. Am Fam Physician 2000;67(11).

Beware of abdominal pain in the elderly!

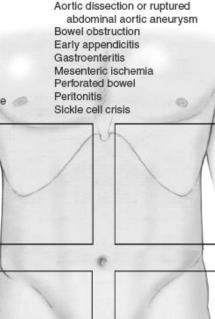
Abdominal pain in the elderly – what are the problems?

- Diminished sense of pain in the elderly
- Comorbid diseases
- Atypical presentations
- Polypharmacy
- Social factors
- 2x more likely to require surgery >65years

DDx of Abdominal pain by location

Right upper quadrant Acute cholecystitis and biliary colic Acute hepatitis Acute pancreatitis Appendicitis Hepatic abscess Hepatomegaly/congestive heart failure Herpes zoster Myocardial ischemia Perforated duodenal ulcer Right lower lobe pneumonia

Right lower guadrant Abdominal wall hematoma Appendicitis Cecal diverticulitis Endometriosis Incarcerated or strangulated inguinal hernia Meckel's diverticulitis Mesenteric adenitis Mittelschmerz Pelvic inflammatory disease Psoas abscess Regional enteritis Ruptured abdominal aortic aneurysm Ruptured ectopic pregnancy Seminal vesiculitis Terminal ileitis (Crohn's disease) Torsed ovarian cyst Ureteral calculi



Diffuse pain Acute pancreatitis

> Left upper quadrant Acute pancreatitis Gastric ulcer Gastritis Left lower lobe pneumonia Myocardial ischemia Splenic enlargement, rupture, infarction or aneurysm

Left lower quadrant Endometriosis Incarcerated or strangulated inguinal hernia Mittelschmerz Pelvic inflammatory disease Psoas abscess Regional enteritis Ruptured abdominal aortic aneurysm Ruptured ectopic pregnancy Seminal vesiculitis Sigmoid diverticulitis Torsed ovarian cyst Ureteral calculi

Figure 9.1

Differential diagnosis of acute abdominal pain by location. Adapted from Wagner DK. Curr Topic 1978;1(3). Sheba Medical Center, Internal Medicine

Abdominal pain history

- S Site
- O –Onset
- C Character
- R radiation
- A associated symptoms
- T timing
- E exacerbating/relieving factors
- S severity

Abdominal pain history

- PMH
 - Similar episodes in past? E.g. Hx small bowel obstructions
 - Any medical conditions? E.g. SLE, Porphyrias, Sickle cell
- PSH
 - Adhesions, hernias, tumours
- Medications
 - NSAIDs, PPIs etc
- Allergies
- Family history
- Gynacology/Urology
 - LMP, bleeding, discharge?
- Social
 - Smoking, alcohol, drugs, unprotected sex, home situation etc

Abdominal Clinical Examination

- Wash hands, Introduce self, explain exam and exposure
- Gain consent
- Position of patient on bed, surroundings
- Ask about pain
- General inspection
 - Look unwell? In pain? Facial expression?
- Vital signs
- Hands, Face, Chest

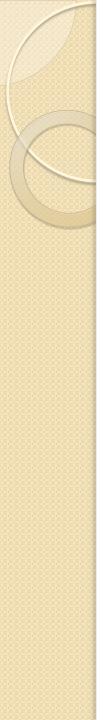
Abdominal Clinical Examination

- Abdomen
 - Inspection
 - Distention? (6Fs) Scars, Bruises, Hernias, muscle rigidity, obvious peristalsis, kaput medusa, Grey-turner sign etc
 - Auscultation
 - Bowel sounds, Aortic and Renal bruits
 - Palpation
 - Light then deep palpation (starting away from pain)
 - Palpate for hepatosplenomegaly, Palpate for kidneys and Aorta, Masses
 - Signs Rebound tenderness, Murphy's, lliopsoas etc
 - Percussion
 - Fluid in abdomen Ascites (fluid thrill, shifting dullness)
 - Enlarged liver dull not resonant
- Also Inspect Groin inguinal hernias
- Rectal exam



Investigations?

- Laboratory
 - FBC
 - U+E
 - LFT
 - Amylase
 - ABG
 - Pregnancy test
- Electrocardiogram



Investigations?

- Radiological Imaging
 - Plain abdominal films
 - Free air, obstruction, foreign bodies
 - Ultrasound
 - Rapid, accurate and inexpensive information
 - Computerised Tomography
 - Scan of abdomen
 - Invaluable but more expensive information
 - Radiation
 - MRI

Management of abdominal pain

- ABCs
- IV access
- Fluid repletion
- Antiemetics
- Analgesics
- Directed testing and imaging
- Re-evaluations
- Antibiotics
- Consultants
 - Surgeons, OB/GYN, urologists, cardiologists, etc



Some tips...

- Abdominal pain in women of child-bearing age is an ectopic pregnancy until proven otherwise
- Be careful of atypical presentations in the elderly - always obtain ECG
- Think in terms of area of pain BUT do not restrict diagnosis solely by location of pain
- Remember Common conditions appear commonly

Thank you!

Questions?