# ACUTE ABDOMEN

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#### ACUTE ABDOMEN

- COMMONEST CAUSE OF EMERGENCY SURGICAL ADMISSION
- CHALLENGING DISEASE VARIETIES
- RANGING FROM SIMPLE TO LIFE THREATENING DISEASES

#### ACUTE ABDOMEN

THE PRIMARY SYMPTOM IS ABDOMINAL PAIN

#### ASSESMENT

- A FULL HISTORY IS A KEY
- COMPLETE PHYSICAL EXAM
- NEEDS DIFFERENT INVESTIGATIONS

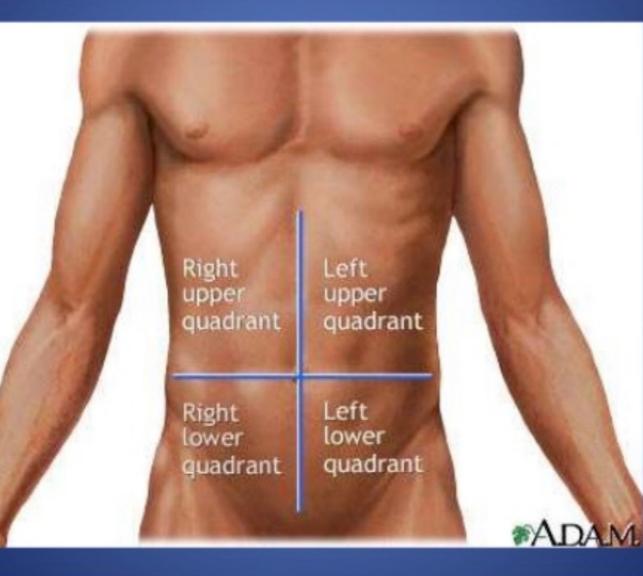
#### TYPES OF ABDOMINAL PAIN

- VISCERAL
- PARIETAL
- REFERRED

#### ACUTE ABDOMINAL PAIN

- Two approaches
- SYSTEMS
- ABDOMINAL TOMOGRAPHY (4 QUADRANTS)

# Abdominal Topography



# Physical Exam (O)

- Palpate each quadrant
  - Work toward area of pain
  - <u>Warm hands</u>
  - Patient on back, knee bent (if possible)
  - Note tenderness, rigidity, guarding, masses



# Laboratory Test

- CBC (limited clinical utility)
- UA / Urine culture
- Lactic acid
- LFT / Amylase / Lipase
- CE / Troponin
- HCG (quant / qual)
- Stool Culture



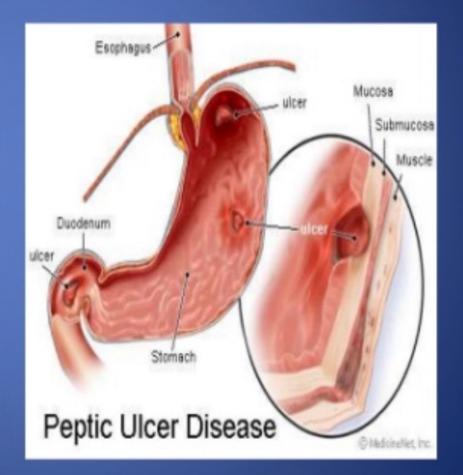
# **Radiographic Test**

 Plain abdominal radiographs or abdominal series has several limitations and is subject to reader interpretation.

 CT scan in conjunction with ultrasound is superior in identifying any abnormality seen on plain film.

## Peptic Ulcer Disease

- Steady, well-localized epigastric or LUQ pain
- Described as a "burning", "gnawing", "aching"
- Increased by coffee, stress, spicy food, smoking
- Decreased by alkaline food, antacids



#### BOWEL OBSTRUCTION

- Small Bowel VS large bowel obstruction
- ADHESIONS ARE THE COMMONEST CAUSE
- IN A VIRGIN ABDOMEN: DON'T LET THE SUN SET ON A BOWEL OBSTRUCTION!

# **ABDOMINAL XR**



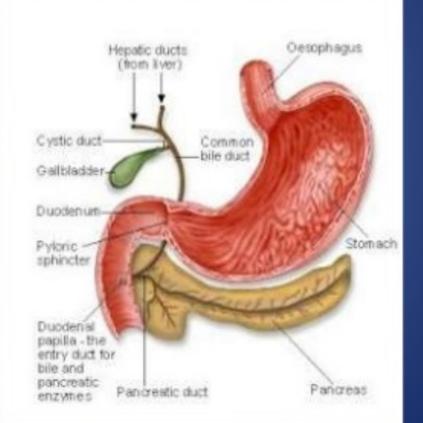


LBO



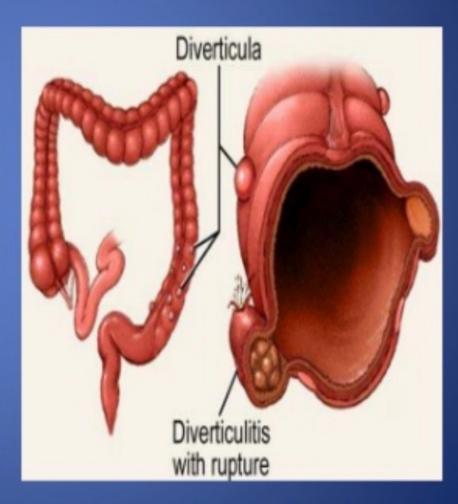
## Pancreatitis

- Inflammation of pancreas
- Triggered by ingestion of EtOH; large amounts of fatty foods
- Nausea, vomiting; abdominal tenderness; pain radiating from upper abdomen straight through to back
- Signs, symptoms of hypovolemic shock



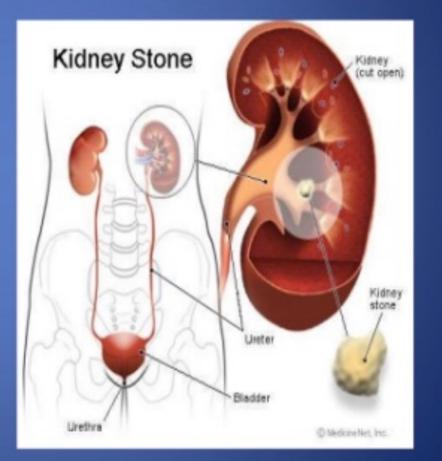
# Diverticulitis

- Pouches become blocked and infected with fecal matter causing inflammation.
- Pain, perforation, severe peritonitis.



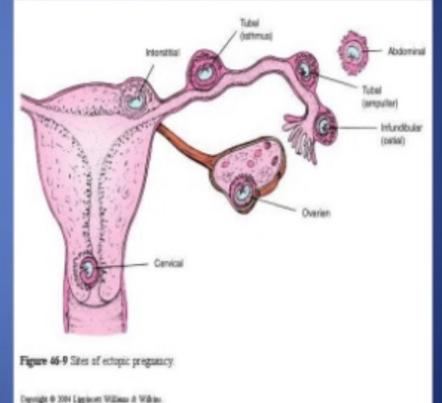
## **Kidney Stone**

- Mineral deposits form in kidney, move to ureter
- Often associated with history of recent UTI
- Severe flank pain radiates to groin, scrotum
- Nausea, vomiting, hematuria
- Extreme restlessness



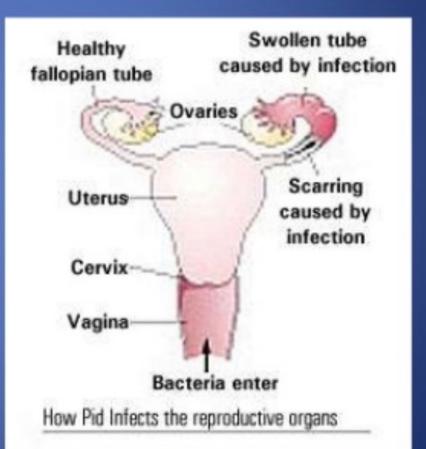
## **Ectopic Pregnancy**

- Fertilized egg is implanted outside the uterus.
- Growth causes rupture and can lead to massive bleeding.
- Patient c/o of severe RLQ or LLQ pain with radiation.



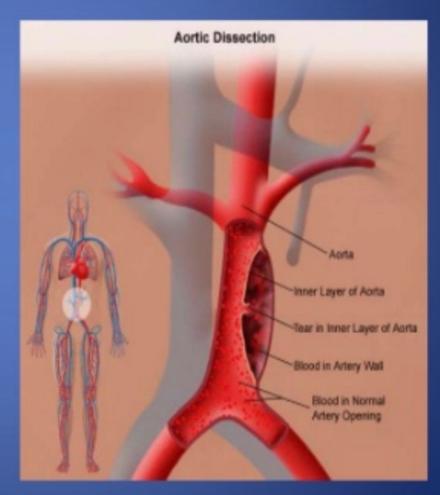
# **Pelvic Inflammatory Disease**

- Inflammation of the fallopian tubes and tissues of the pelvis
- Typically lower abdominal or pelvic pain, nausea, vomiting



# Abdominal Aortic Aneurysm

- Localized weakness of blood vessel wall with dilation (like bubble on tire)
- Pulsating mass in abdomen
- Can cause lower back pain
- Rupture shock, exsanguination



#### Mesenteric Ischemia (MI)

Diagnosis can be divided into the following:

#### 1. Arterial insufficiency

- Occlusive Embolic (A. Fib) / Thrombotic
  - Embolic MI has the most abrupt onset.
- Nonocclusive Low flow state (AMI / Shock)
  - Usually has clinical evidence of a low flow state ( acute cardiac disease)

### Mesenteric Ischemia (MI)

#### 2. Venous – Mesenteric Venous Thrombosis

- Occurs in hypercoagulable states.
- Usually is found in younger pts.
- Has a lower mortality.
- Can be treated with immediate anticoagulation.

## **Ischemic Colitis**

- It is a diagnosis of an older patient.
- Pain described as diffuse, lower abdominal pain in 80% of pts.
- Can be accompanied by diarrhea often mixed with blood in 60% of patients.
- Compares to mesenteric ischemia, this is not due to large vessel occlusive disease.
- Angiography is not indicated. If it is performed it is often normal.

#### Extrabdominal Diagnoses of Acute Abdominal Pain: Cardiopulmonary

- Pain is usually in upper half of abdomen.
- A chest film should be done to look for pneumonia, pulmonary infarction, pleura effusion, and / or pnemothorax.
- A neg. film plus pleuritic pain could mean PE.
- If epigastric pain is present one should inquire about cardiac history, get and ECG, and consider further cardiac evaluation.

# **Inguinal Hernia**

- Protrusion of the intestine through a tear in the inguinal canal.
- Usually identified by abnormal mass in lower quadrant, with or without pain.
- Strangulation can lead to necrosis.





