

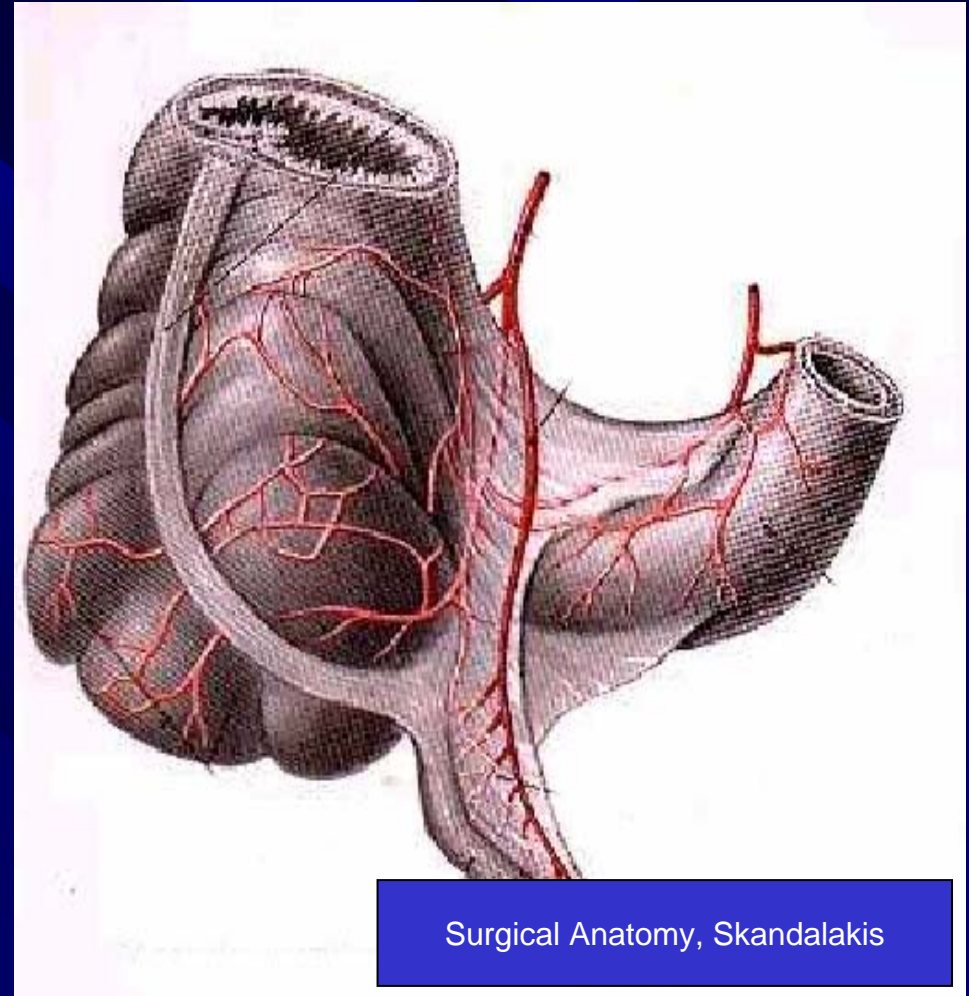
ACUTE APPENDICITIS

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VERMIFORM APPENDIX

ANATOMY

- Description
- Size



Surgical Anatomy, Skandalakis

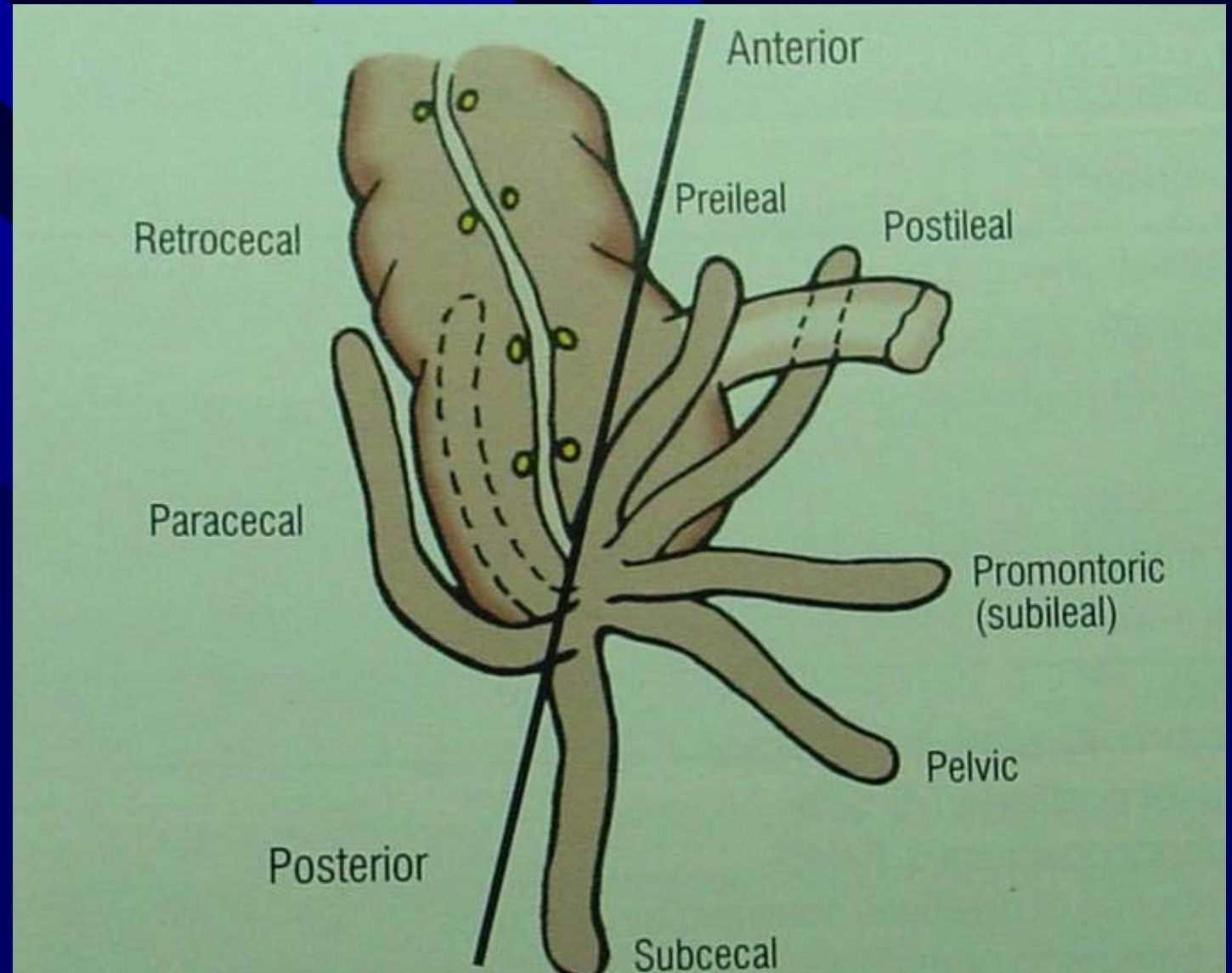
ANATOMY

■ Localization

- Pelvic
- Retrocecal
- Subcecal
- Paracecal
- Pre-ileal
- Post-ileal

■ Anomalies

- Absence
- Duplication
- Diverticulum

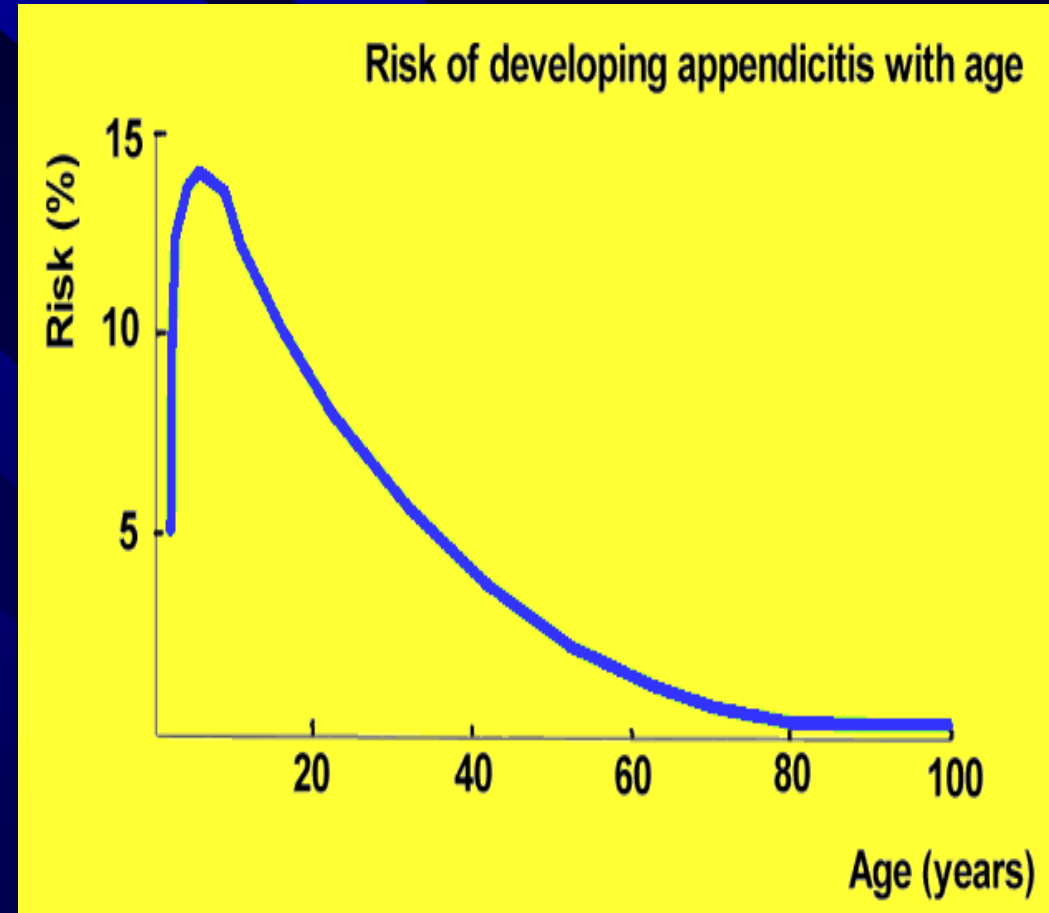


PHYSIOLOGY

- **No function**
- **Immunologic function**
(*GALT: Gut Associated Lymphoid Tissue*)
- **Function is not essential**

INCIDENCE

- Most common acute surgical condition of the abdomen
- Peak incidence is in early adulthood
- 7-10% of population develop acute app.
- More common in man (1.3-2/1)



ETIOLOGY

- **Obstruction of the lumen (2/3)**
 - Fecalith (hardened stool)
 - Hypertrophy of lymphoid tissue
 - Vegetable & fruit seeds
 - Intestinal worms
 - Inspissated barium
 - Tumor (prim./met./carcinoid)
- **No luminal obstruction (1/3)**

PATHOGENESIS

- Proximal obstruction
- Distal distention
- Compromised blood supply
- Progression to gangrene and perforation
- Peritonitis
 - Generalized
 - Localized
 - Phlegmon (plastrone)
 - Abscess

MORPHOLOGY

- ACUTE APPENDICITIS
 - Acute catarrhal appendicitis
 - Acute suppurative appendicitis
 - Acute gangrenous appendicitis
- CHRONIC APPENDICITIS (?)





BACTERIOLOGY

- *Bacteroides fragilis* 100%
- *Escherichia coli* 100%
- *Peptostreptococcus* 80%
- *Pseudomonas* 40%
- *Bacteroides splanchnicus* 40%

CLINICAL MANIFESTATIONS

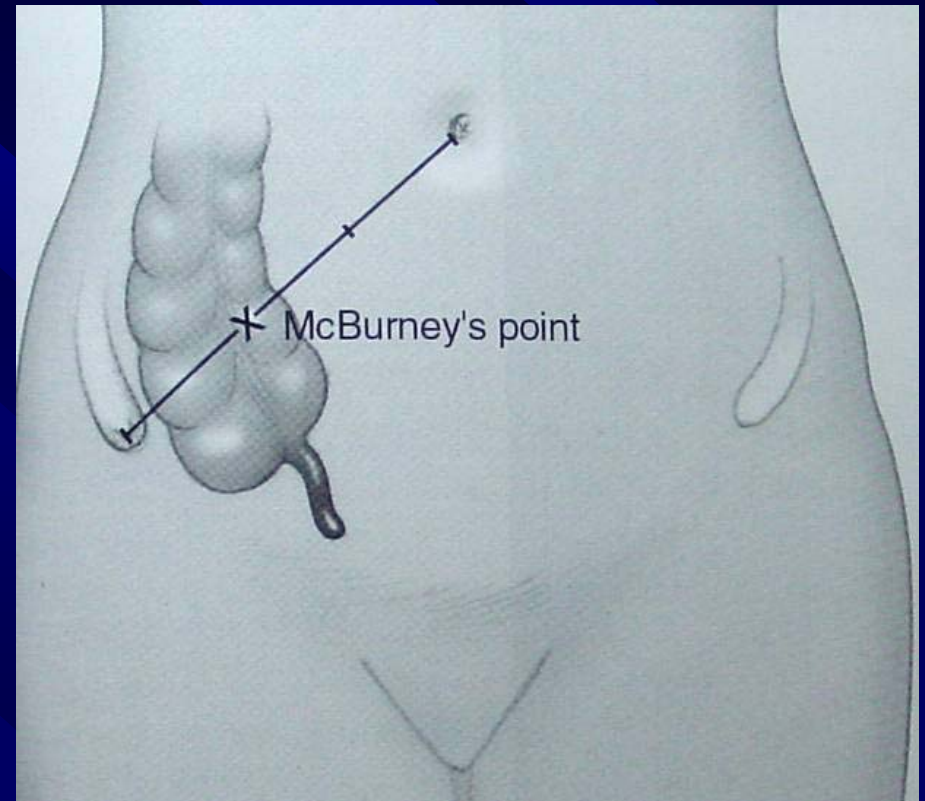
SYMPTOMS

- Pain 100%
- Anorexia 100%
- Nausea 90%
- Vomiting 75%
- Pain migration 50%

CLINICAL MANIFESTATIONS

SIGNS

- Temperature
(Low-grade $<38^{\circ}\text{C}$)
- Peritoneal irritation signs
 - McBurney
 - Rebound tenderness
(Blumberg)
 - Rousing
 - Psoas
 - Obturator
- Pelvic examination



LABORATORY FINDINGS

■ Leukocytosis

- > 10.000 per mm³ 80%
- Neutrophilia 90%

■ Elevated C-reactive protein (?)

- > 0.8 mg per dL

■ Urinalysis

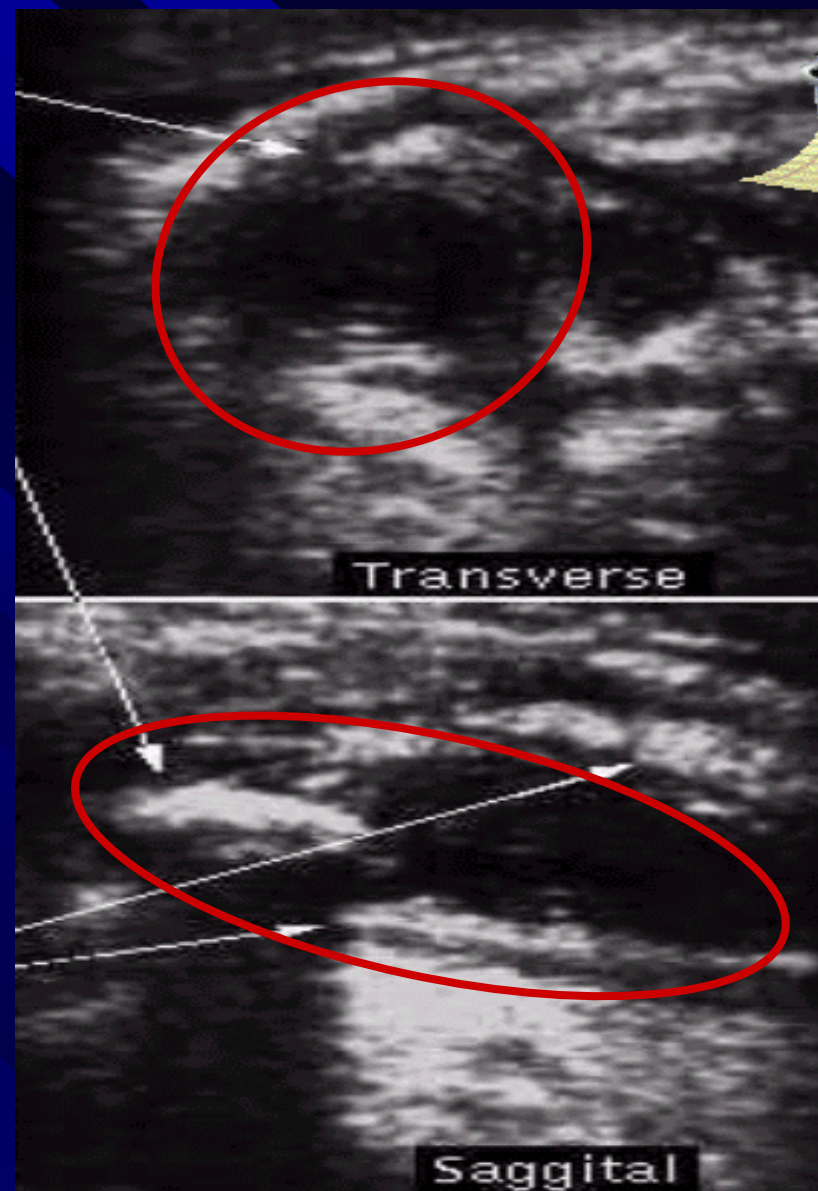
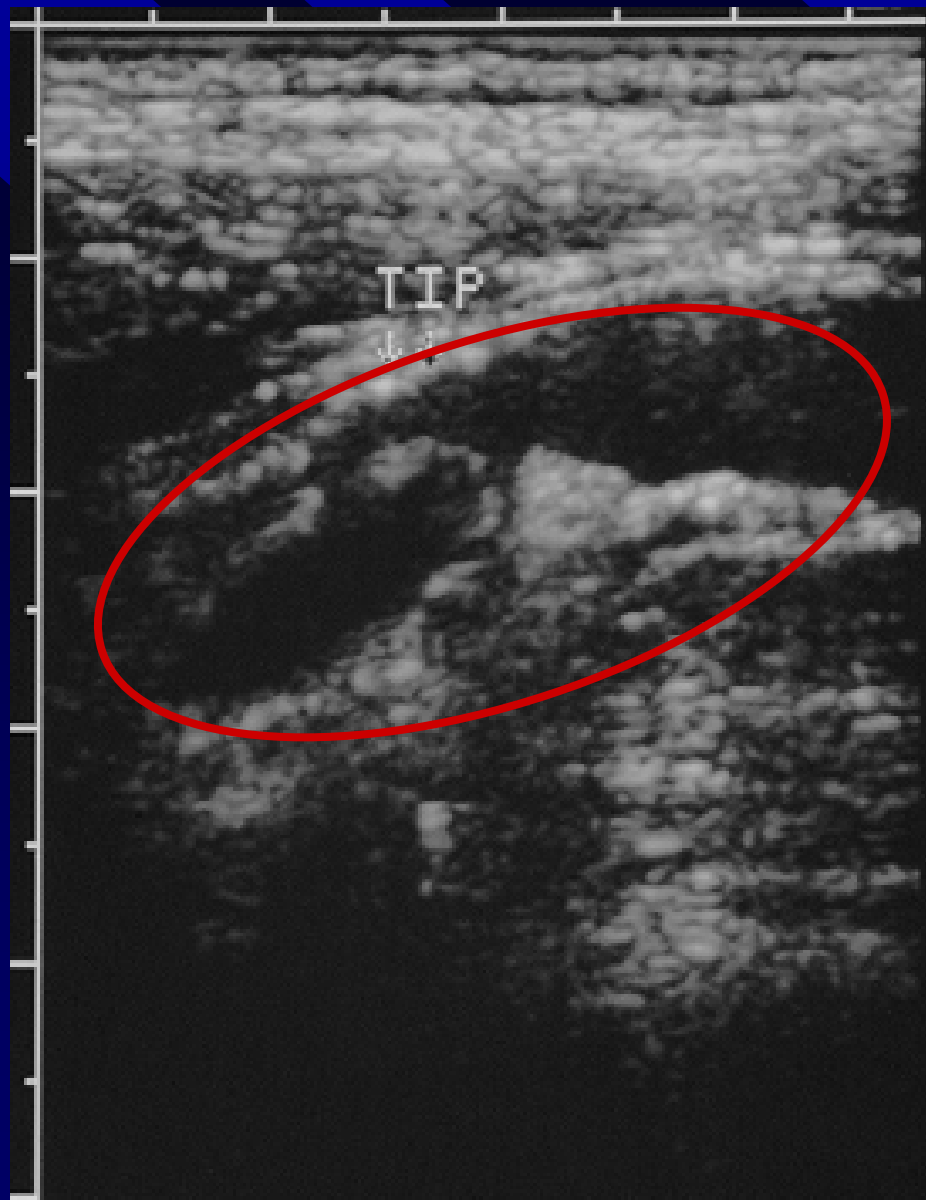
- Pyuria
- Hematuria
- Proteinuria

IMAGING STUDIES

- Plain abdominal film
- US
- CT
- Barium enema



Appendicolith

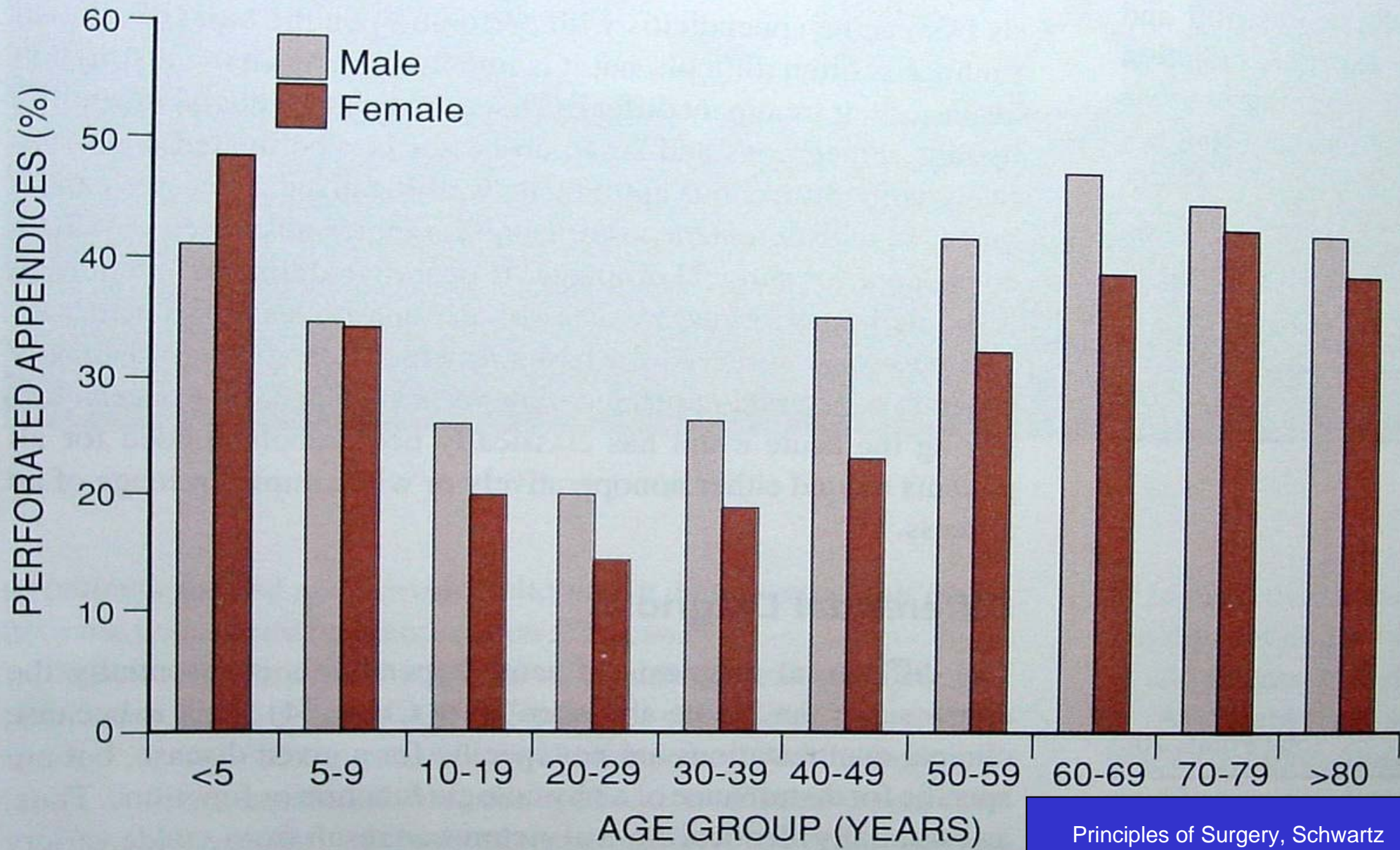


DIFFERENTIAL DIAGNOSIS

- Acute mesenteric adenitis *
- Acute gastroenteritis
- Meckel's diverticulum
- Intussusception
- Regional enteritis
- Perforated peptic ulcer *
- Acute cholecystitis *
- Urinary tract disorders *
- Gynecologic disorders *
 - PID
 - Ruptured Graafian follicle
- Henoch-Schönlein purpura
- Others

SPECIAL CONDITIONS

- Appendicitis in the young
- Appendicitis in the elderly
- Appendicitis during pregnancy



8 Months

7 Months

6 Months

5 Months

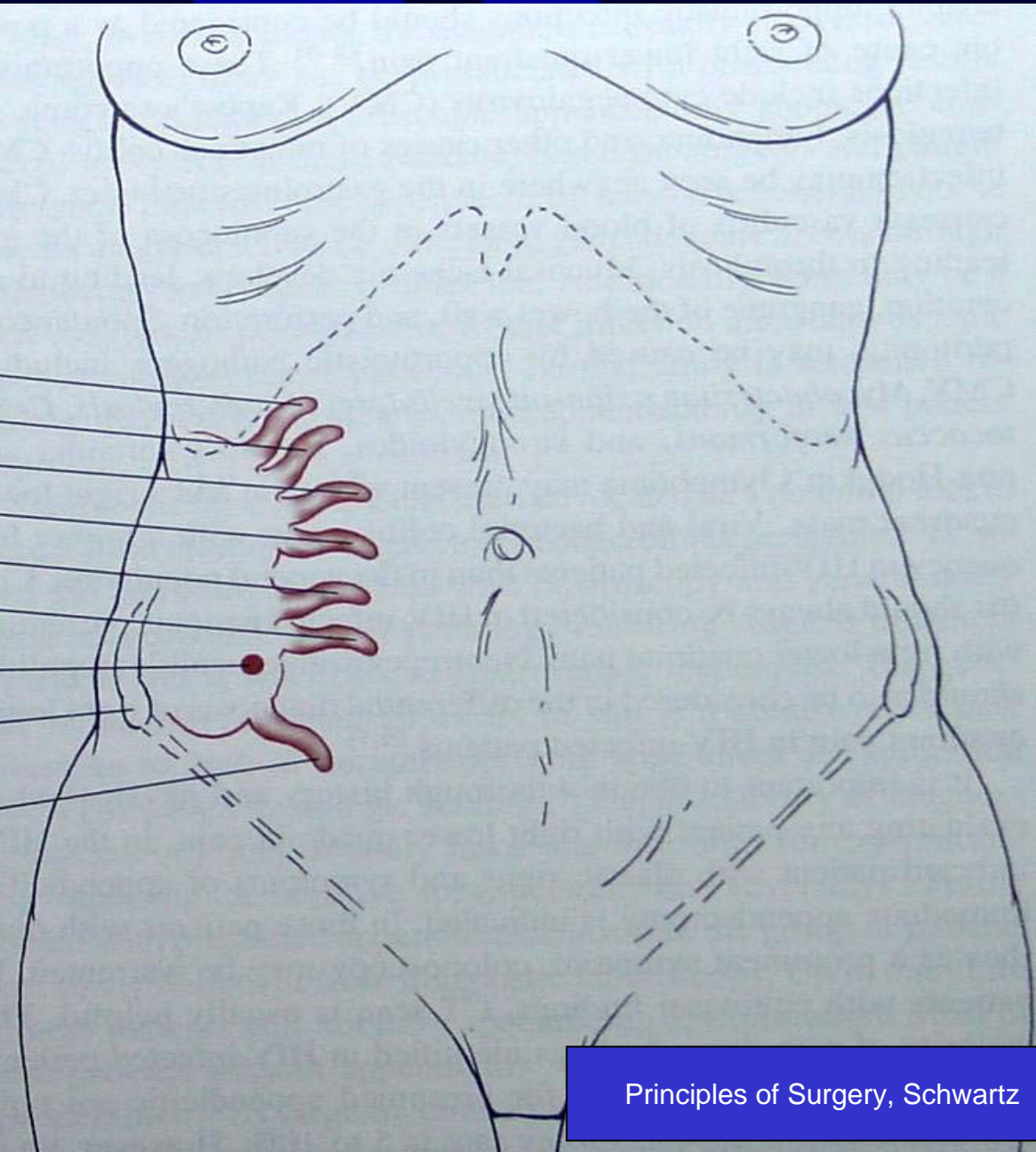
4 Months

3 Months

McBurney's point

ASIS

Normal location



COMPLICATIONS

- Perforation

(Overall: 25%, < Age 10: 50%, Age 10-50: 10%, > Age 50: 30%)

- Peritonitis

- Appendiceal abscess

- Phylephlebitis

APPENDICITIS

■ TREATMENT

- Appendectomy
 - Open
 - Laparoscopic
- Interval appendectomy

■ PROGNOSIS

- Perforation
 - In patients under age 10 or over age 50 (50 %)
 - Others (10 %)
- Death
 - Simple (< 0.1 %)
 - Perforated (5 %)