

# SIGNS/SYMPTOMS<sup>1</sup>

- Pain in epigastric or R lower quadrant.
- R thigh, and/or R groin area pain.
- Nausea, vomiting
- Dysuria (painful/ difficulty urinating)
- Low-grade fever
- Anorexia
- (+) McBurney's, rebound, hop test.
- (+) Rovsing sign, Obturator sign, psoas sign.

### **RISK FACTORS**<sup>1,2</sup>

# Modifiable: diet, access to healthcare for correct dx., crohn's disease, ulcerative colitis. Non-Modifiable:

- Ages 10-30 years old
- Men: woman 3:2
- Family history of appendicitis
- Cystic fibrosis

# EPIDEMIOLOGY 1,6,8

#### <u>Who is affected</u>: More common in adolescents (teenagers) and individuals in their twenties. Men 1.4 X more likely than women.

How many: 1/1,000 individuals in the U.S. are affected by appendicitis every year (7% of individuals in the U.S)

Currently appendicitis is decreasing in prevalence in the U.S., possibly due to an increase in fiber intake.

### PHYSICIAN REFERRAL 1,8

**IMMEDIATE MEDICAL ATTENTION** is always required for suspected appendicitis in order to reduce the risks associate with a rupture. A medical condition in which the **appendix becomes inflamed**, often resulting from an infection or blockage. This condition causes pain in a one's lower right abdomen. If untreated, appendicitis can result in a ruptured appendix which will spread the infection throughout the abdomen and become **life- threatening.**<sup>8</sup>

## ROLE OF THE APPENDIX 1,3

The appendix, also known as the vermiform process, has been labeled a vestigial organ. This means that at one time this organ may have been used by humans, but currently has no known function. Although new research shows it has some function in one's immune system by helping rebalance bacteria after a GI disease.

### **CAUSE OF APPENDICITIS 8**

• Vestigi

## COMPILCATIONS OF APPENDICITIS <sup>6</sup>

If left untreated appendicitis can have severe complications, including a rupture which can lead to sepsis and increase one's risk of death. If the perforated appendix becomes walled off it can become an abscess (pocket of infection) that can cause severe discomfort and infection.

## **DIAGNOSIS/PROGNOSIS**<sup>3,4</sup>

#### Abdominal Exam

McBurney's Point: Pt. is supine, gently palpate 1/2 distance from ASIS to the umbilicus. Access for pain and tenderness. Blumberg's Sign (Rebound Tenderness): Broad hand over the RLQ. Press down gently and deeply for 15 – 30 secs then QUICKLY remove pressure. Access for increased pain with removal of pressure.

**Pinch and inch:** Grasp skin over McBurney's point and release. Access for increased pain when releasing skin.

<u>Other Medical Diagnosis</u>: Abdominal ultrasound, urine tests, CT Scan, blood test, MRI. CT scan is the \* Gold Standard\*, professionals tend to use ultrasound on children/pregnant individuals.

#### **Prognosis**

- Mortality rate of 0.2-0.8% due to complications associated with appendicitis
- Perforation rate in children (40-57%), >50 years (55-70%).

### TREATMENT <sup>5, 7</sup>

**Immediate appendectomy:** surgical removal of the appendix. The surgery can be laparoscopic or an open incisional surgery. If perforation occurred, draining of abscess must proceed removal. Surgery is recommended for all individuals that have appendicitis along with antibiotics to reduce spread of infection.

#### Karla Graves

#### PHYT 798: Advanced Cases and Differential Diagnoses

References

- 1. Goodman CC, Snyder TEK. *Differential Diagnosis for Physical Therapists Screening for Referral*. St. Louis, MO: Saunders Elsevier; 2007.
- 2. Drescher M, Marcotte S, Grant R, Staff I. Family History is a Predictor for Appendicitis in Adults in the Emergency Department. *Western Journal of Emergency Medicine*. 2012;13(6):468-471.
- 3. Kosloske AM, Love CL, Rohrer JE, Goldthorn JF, Lacey SR. The Diagnosis of Appendicitis in Children: Outcomes of a Strategy Based on Pediatric Surgical Evaluation. *Pediatrics*. 2003;113(1):29-34.
- 4. Alvarado A. A practical score for the early diagnosis of acute appendicitis. *Ann Emergency Med.* 1986.
- 5. Kim SH, Park SJ, Park YY, Choi SI. Delayed Appendectomy Is Safe in Patients With Acute Nonperforated Appendicitis. *Internal Surery*. 2015 Jun.
- 6. Pham XD, Sullins VF, Kim DY, et al. Factors predictive of complicated appendicitis in children. *J Surg Res.* 2016 Nov. 206(1):62-6.
- Karamanakos SN, Sdralis E, Panagiotopoulos S, Kehagias I. Laparoscopy in the emergency setting: a retrospective review of 540 patients with acute abdominal pain. *Surg Laparosc Endosc Percutan Tech*. 2010.
- Appendicitis Treatment & Management. Sickle Cell Anemia Differential Diagnoses. https://emedicine.medscape.com/article/773895-treatment. Published November 16, 2018. Accessed January 26, 2019.