

Appendicitis



[Untitled Image of Abdomen Pain]. Retrieved May 13, 2016 from <http://www.health.harvard.edu/diseases-and-conditions/appendicitis>

Pathophysiology:

Appendicitis is an inflammation of the appendix, a small organ attached to the cecum of the large intestine. This inflammation is caused by an obstruction of the appendiceal lumen (the internal cavity of the appendix). Because the appendix is constantly secreting mucus from its mucosa to keep the tissue moist and prevent pathogens from entering the bloodstream, a blockage results in increased intraluminal pressure. An increase in intraluminal pressure can decrease blood flow to the appendix, leading to tissue hypoxia. This causes an ulceration of the appendix lining, which can become infected and results in the inflammation and edema associated with appendicitis (McCance & Huether, 2014).

The following summary sheet outlines the pathophysiology of how appendicitis can develop, modifiable and non-modifiable risk factors, clinical manifestations, and treatment options.

Risk Factors:

Modifiable Risk Factors: *Low dietary intake of fibre* increases the viscosity of feces and can cause fecal matter to become lodged in the appendix, obstructing the lumen.

Non-Modifiable Risk Factors:

Age – peak incidence between ages 10-19 years; risk decreases with age after this point.
Gender – 1.4x greater risk in men.
Family History - ~3x greater risk.
Trauma to appendix and *previous infection* will also increase the risk of appendicitis. (Craig, 2015).

Signs and Symptoms:

A major indicator of appendicitis is abdominal pain starting at the belly button and migrating to the right lower quadrant. Other common symptoms include: nausea/vomiting, lack of appetite, constipation or diarrhea, fever, and abdominal swelling. Individuals with appendicitis may find that it is painful to move, walk, cough, breath, and that pain worsens over time; they may also demonstrate abdominal guarding posture to limit pain associated with movement (Jarvis et al, 2014). Appendicitis is a serious health issue so if you have these symptoms it is important to seek medical attention.

Management:

The standard treatment for appendicitis is an appendectomy (surgical removal of the appendix). This may be done through a laparoscopic appendectomy, open appendectomy, or through emerging technology routes like a natural orifice transluminal endoscopic surgery. Uncomplicated appendicitis may be treated using antibiotic therapy alone, but that individual is at an increased risk for recurrence and will likely need an appendectomy in the future (Wilms et al, 2011). Prior to surgery, individuals with appendicitis will receive broad-spectrum antibiotics to reduce the risk of wound infection. If they have complicated perforated appendicitis, post-operative IV antibiotics will be continued for 3-5 days to prevent infection from the contents of the appendix that may have spilled into the abdominal cavity. Antibiotics will be discontinued when the patient mobilizes independently, tolerates two meals consecutively, and have a temperature <38°C for 24 hours (Bhangu et al, 2015).

More information available at:
www.appendicitisinfo4u.weebly.com