The American College of Emergency Physicians reports that up to one-third of women of childbearing age with appendicitis are misdiagnosed. The most common misdiagnoses are PID or urinary tract infection. Furthermore, the literature shows that the 20% to 30% false-positive appendectomy rate in men is almost twice as high in women. A study of 174 women aged 15 to 45 found that 33% with appendicitis were misdiagnosed — with the most common misdiagnosis being PID. Due to the severe complications associated with misdiagnosis of PID and appendicitis, all providers need to be aware of which evaluation strategies are helpful in diagnosis and which are not.

This continuing education article provides current information about the proper evaluation of women with equivocal signs and symptoms of appendicitis and PID. It is important to note that there are many etiologies of abdominal pain in women of childbearing age. This article focuses on the differences in manifestations of appendicitis and PID only.

**Sequelae of Untreated Appendicitis or PID**

A delay or lack of treatment for acute appendicitis usually results in appendix perforation. Although symptoms of pain may decrease for a while after perforation, the patient will eventually become systemically ill. The goal is to avoid the complication of perforation because it can lead to generalized peritonitis. By decreasing the rate of perforation, you can minimize mortality and morbidity.

Delayed treatment of PID also has severe consequences. Sequelae of untreated PID can include increased risk for ectopic pregnancy, infertility, pelvic adhesions, pyosalpinx, chronic pelvic pain, dyspareunia, tubo-ovarian abscess, and recurrent PID. It is important to note that the intensity of pain the woman experiences is not always directly related to the severity of the infection. Women with mild pain can have severe tubal disease.

**Clinical Manifestations**

Appendicitis is an inflammation of the appendix secondary to a luminal obstruction caused by a variety of mechanisms. Once inflammation has occurred, pain usually begins as a referred pain that gradually localizes to the right lower quadrant of the abdomen. If this inflammation and inadequacy of blood flow to the appendix progresses

The classic **symptoms of appendicitis** are migration of pain from mid-abdomen to the right lower quadrant of the abdomen near McBurney’s point along with nausea, vomiting, anorexia and low-grade fever.