

## Primary Diagnosis: **Appendicitis**

An inflammation of the appendix, typically due to blockage by feces, a foreign object, or cancer.

1. Describe the pathophysiology of the primary diagnosis in your own words. What are the patient's risk factors for this diagnosis?

| Pathophysiology of Primary Diagnosis                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                |
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| Appendicitis occurs when the appendix becomes blocked, leading to inflammation, infection, and, if untreated, perforation. Fecal material, foreign bodies, or lymphoid hyperplasia may cause the blockage. When the appendix is obstructed, bacteria multiply, causing infection and pus formation, which increases pressure within the appendix. This can lead to ischemia and necrosis of the appendix tissue. |                                                                                                                                                                                                                |
| Causes                                                                                                                                                                                                                                                                                                                                                                                                           | Risk Factors (genetic/ethnic/physical)                                                                                                                                                                         |
| <ul style="list-style-type: none"><li>○ Obstruction of the appendix lumen by fecaliths, foreign bodies, or cancer</li><li>○ Lymphoid hyperplasia</li><li>○ Infection</li></ul>                                                                                                                                                                                                                                   | <ul style="list-style-type: none"><li>○ Family history of appendicitis</li><li>○ Males are more commonly affected</li><li>○ Adolescents and young adults are at higher risk</li><li>○ Low-fiber diet</li></ul> |

2. What are the patient's signs and symptoms for this diagnosis? How does the diagnosis impact other body systems, and what are the possible complications?

| Signs and Symptoms – Common presentation                                                                                                                                                                                                                                                                                                  | How does the diagnosis impact each body system? Complications?                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <ul style="list-style-type: none"><li>○ Sudden onset of abdominal pain, typically starting around the umbilicus and migrating to the right lower quadrant (McBurney's point)</li><li>○ Nausea and vomiting</li><li>○ Loss of appetite</li><li>○ Low-grade fever</li><li>○ Rebound tenderness</li><li>○ Constipation or diarrhea</li></ul> | <p><b>Body System: Gastrointestinal</b><br/><b>Impact:</b> Inflammation of the appendix causes severe pain and infection.<br/><b>Complications:</b> Perforation, abscess, or peritonitis</p> <p><b>Body System: Peritoneal</b><br/><b>Impact:</b> If perforation occurs, bacteria can leak into the abdominal cavity.<br/><b>Complications:</b> Peritonitis, abscess formation</p> <p><b>Body System: Systemic</b><br/><b>Impact:</b> If untreated, widespread infection can lead to sepsis.<br/><b>Complications:</b> Sepsis, death</p> |

3. What other potential diagnoses present similarly to this diagnosis (differentials)?