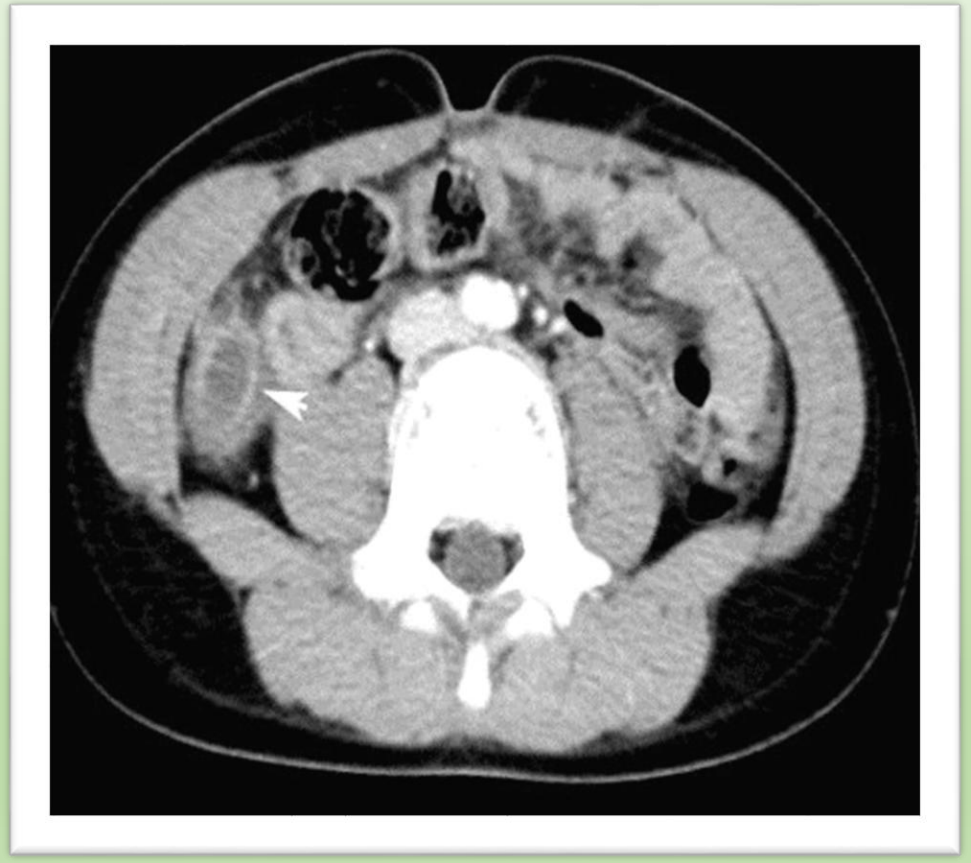
CASE DISCUSSIONS
INFLAMMATION & REPAIR
2025 Al-Abbadi
University of Jordan
School of Medicine

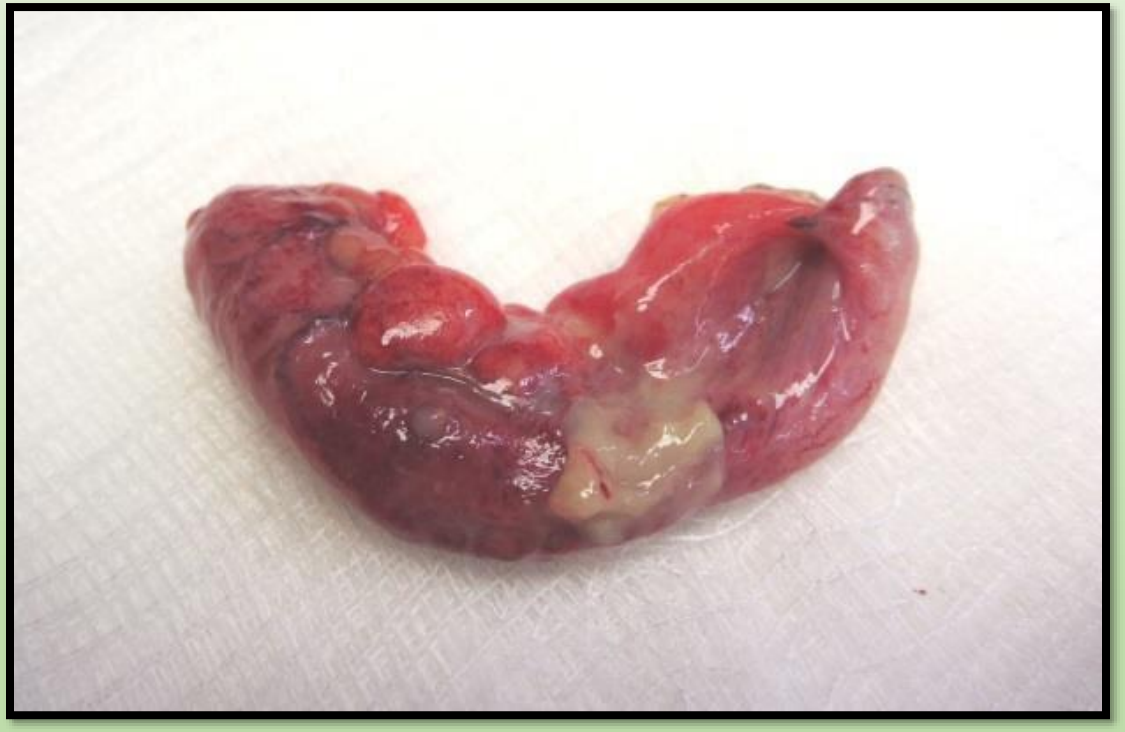
CASE 1(end of first week)

A 25-year-old male presents to the emergency department with severe abdominal pain, nausea, and vomiting. Physical examination reveals tenderness in the right lower quadrant. Laboratory tests show elevated white blood cell count (leukocytosis of 18,000 / ML). Preoperative CT scan is shown. CT scan The patient undergoes surgery. Gross and histological examination of organ removed is shown.

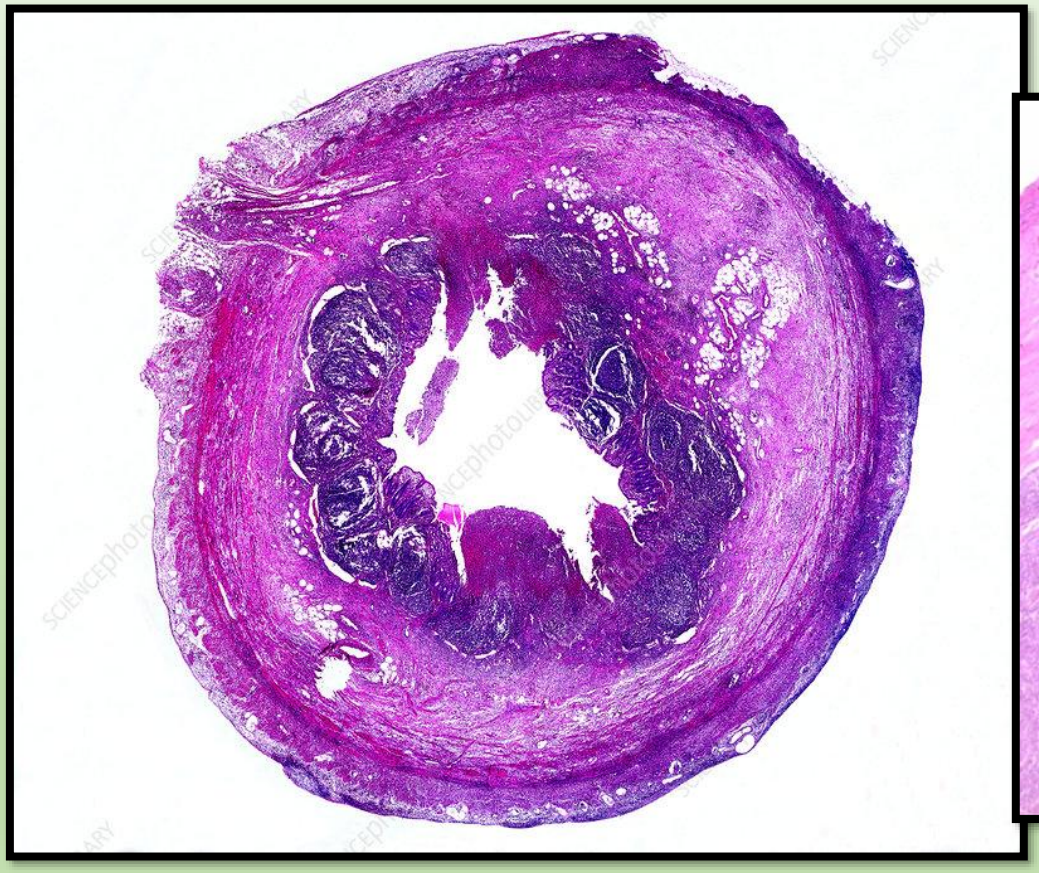
CT SCAN



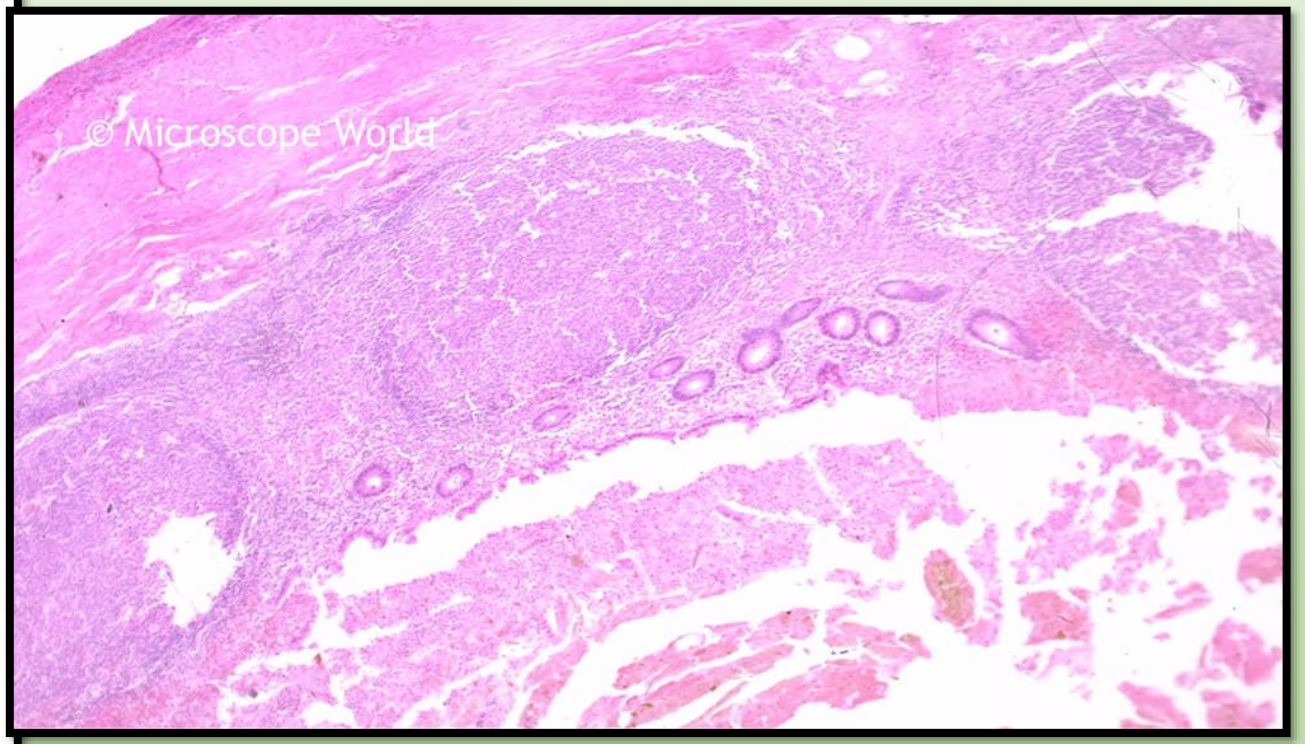
GROSS



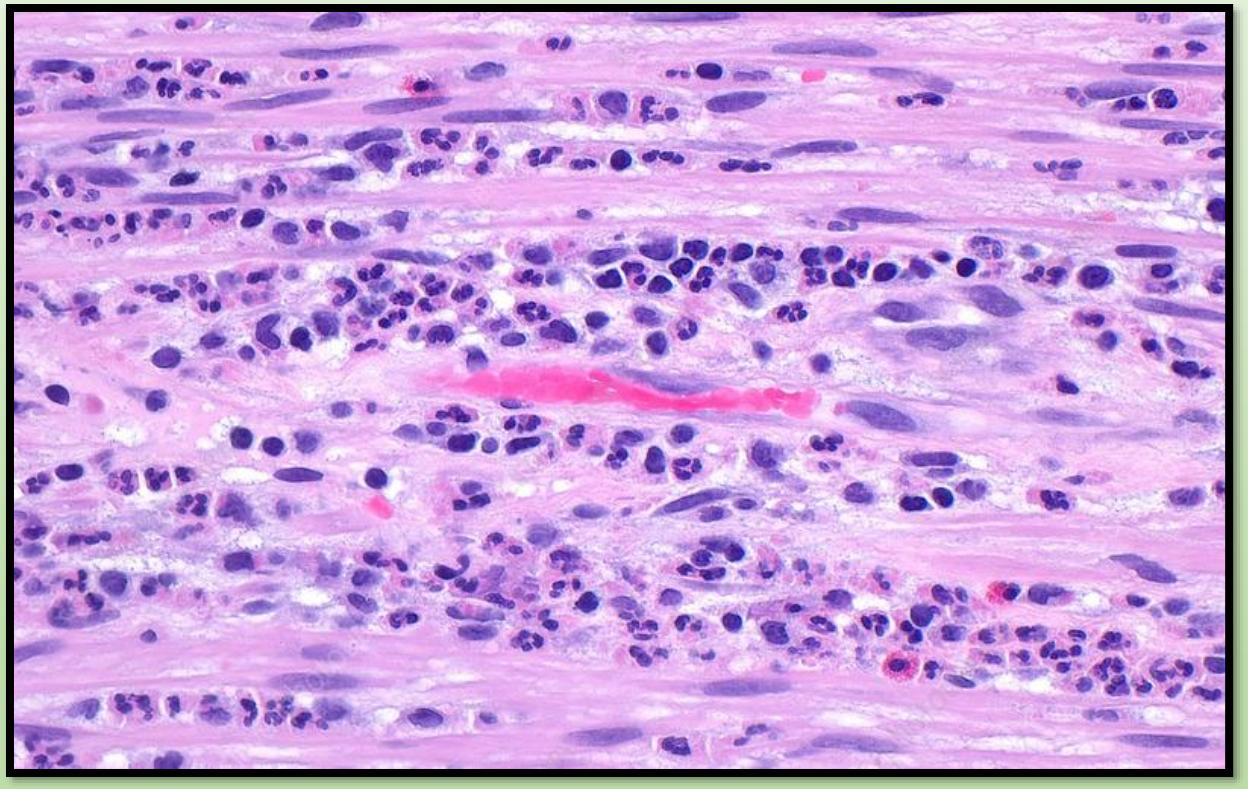
LOW POWER

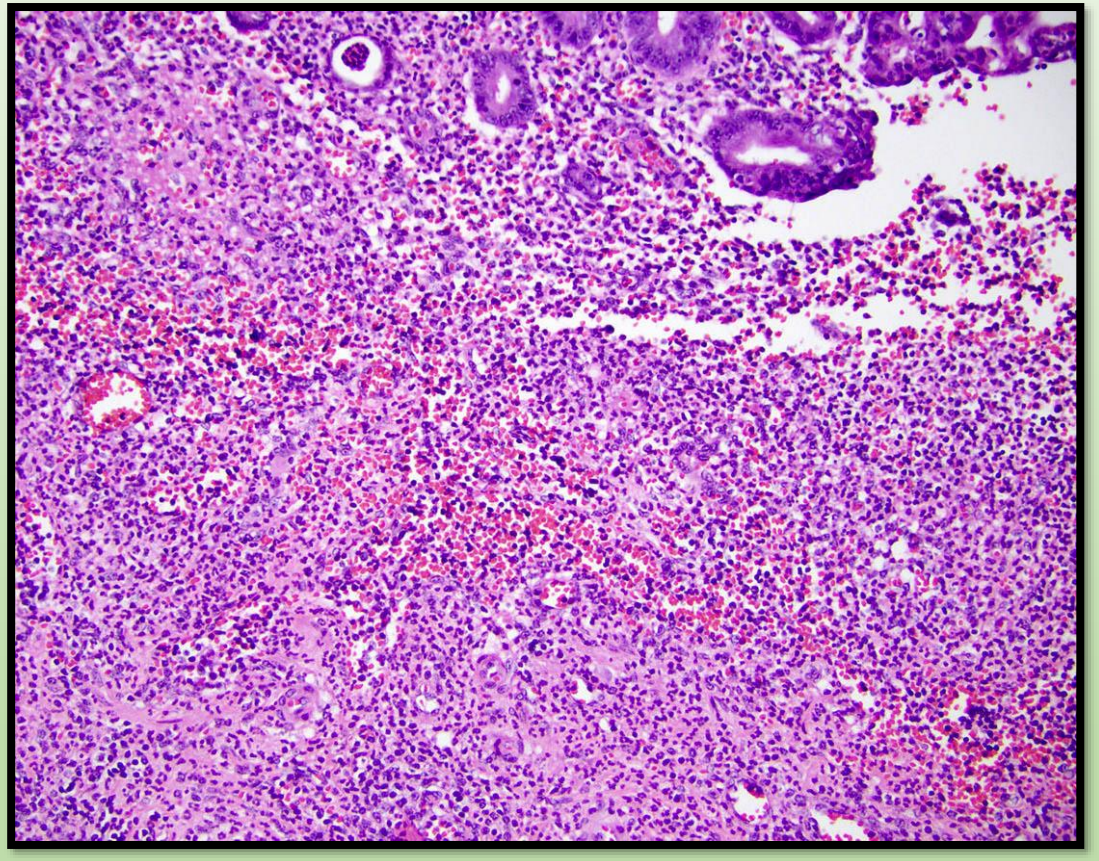


HIGHER POWER



HIGH POWER MICROSCOPY





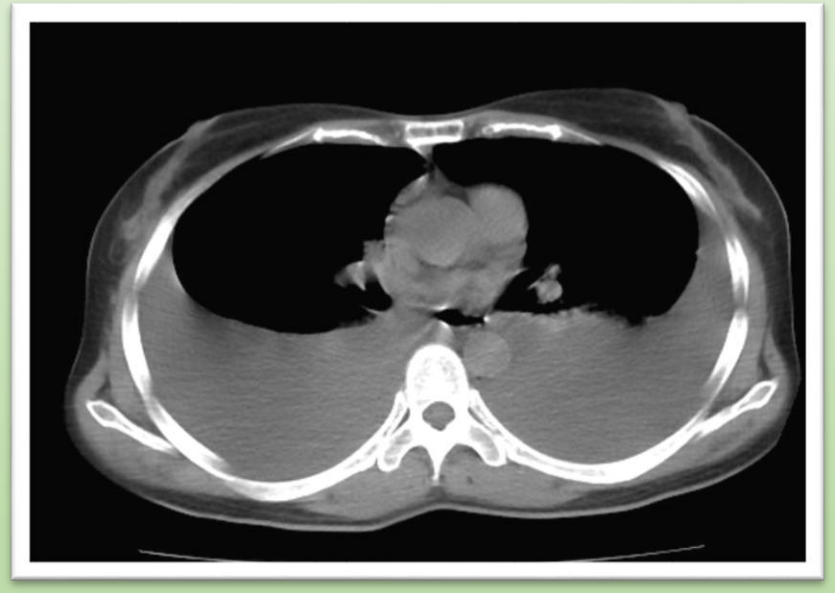
Discussion points:

1. What is the final pathologic diagnosis?
2. What are the cardinal signs of acute inflammation in this patient?
3. How does the body respond to the bacterial infection in the appendix?
4. What are the potential complications of untreated acute appendicitis?

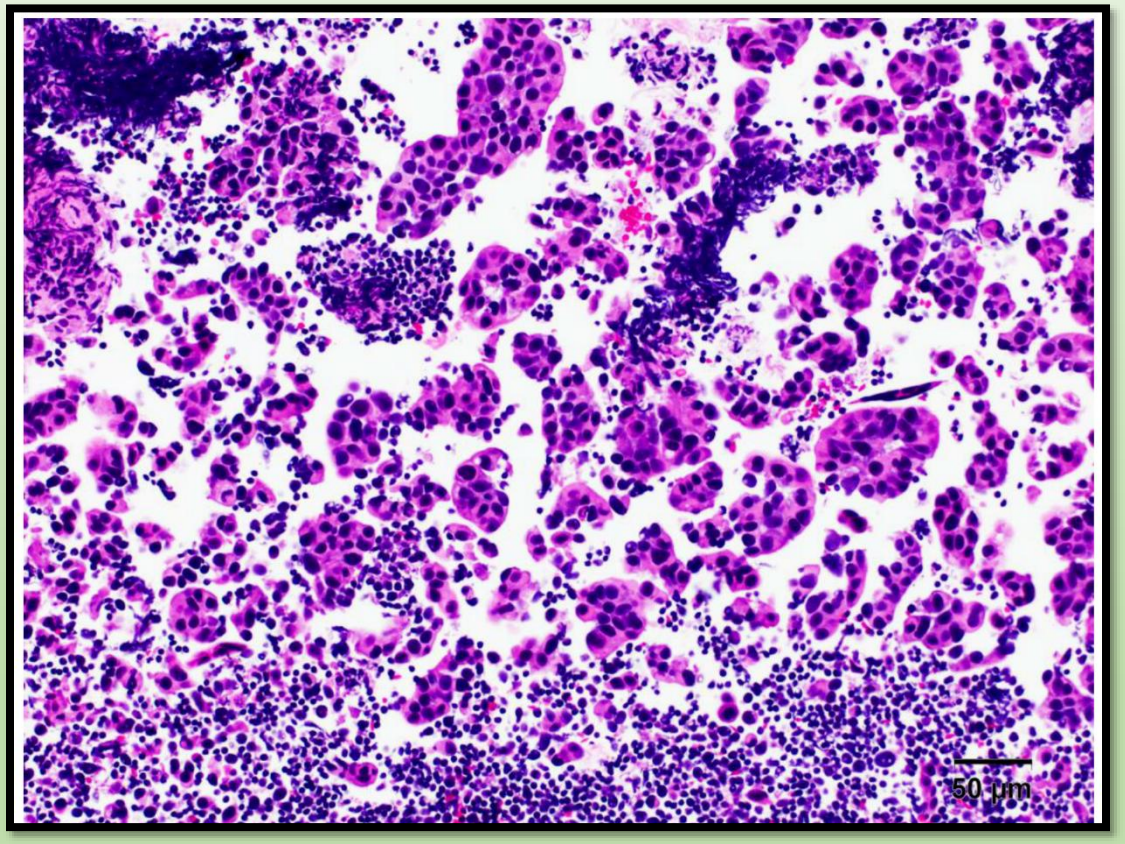
CASE 2 (end of 2nd week):

A 50-year-old female with a history of breast cancer presents with shortness of breath and chest pain. Imaging studies reveal bilateral pleural effusion. Thoracentesis is performed, and the pleural fluid analysis shows a high protein level and low glucose level. CT scan and fluid cytology microscopy are shown.

CT SCAN



Pleural Fluid CYTOLOGY



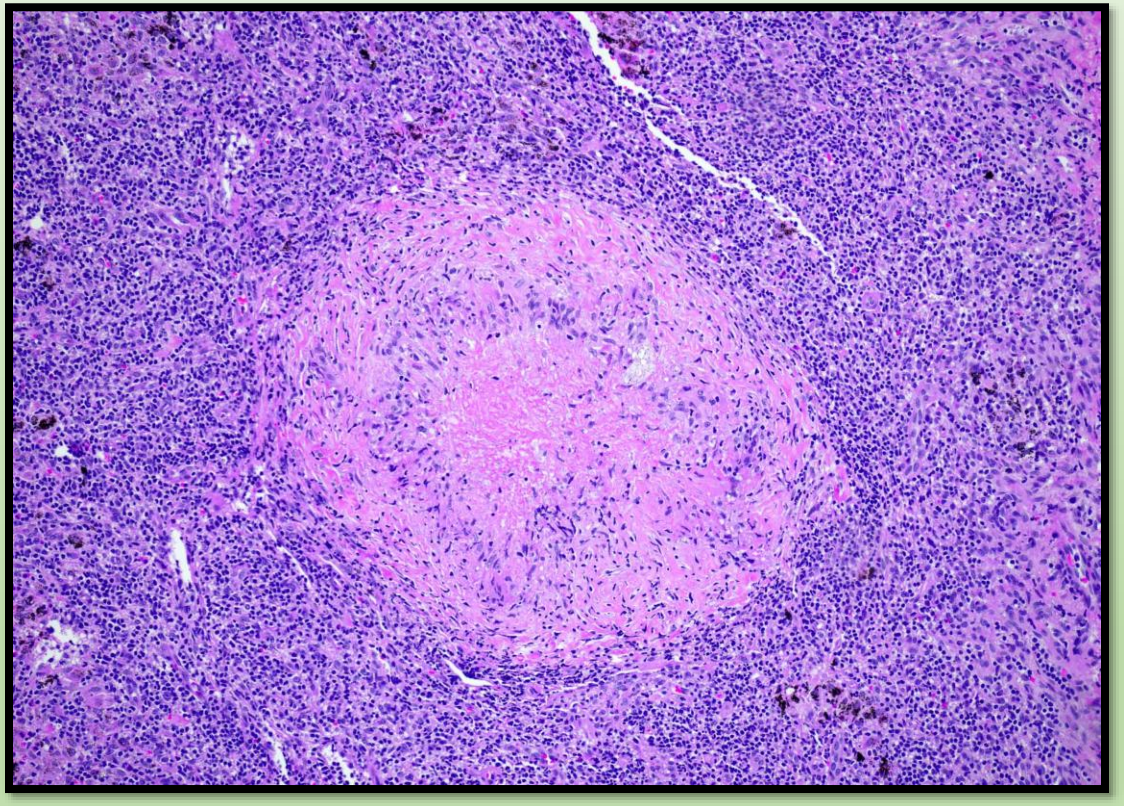
DISCUSSION POINTS:

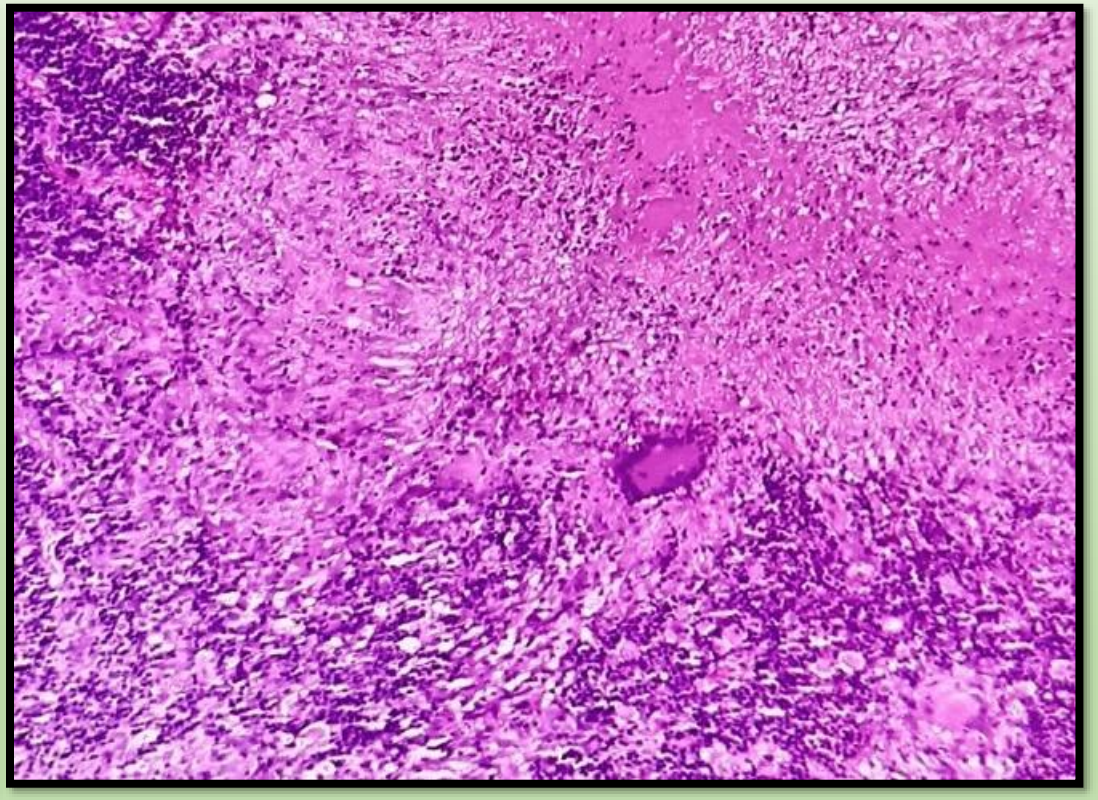
- **What are the characteristics of an exudative pleural effusion?**
- **How does metastatic breast carcinoma lead to pleural effusion?**
- **What are the potential treatment options for this patient?**

Case 3 (end of 3rd week):

A 30-year-old male presents with a persistent cough, fever, and weight loss. Chest X-ray shows bilateral hilar lymphadenopathy. A biopsy of the lymph node is shown?

MICROSCOPIC EXAMINATION:





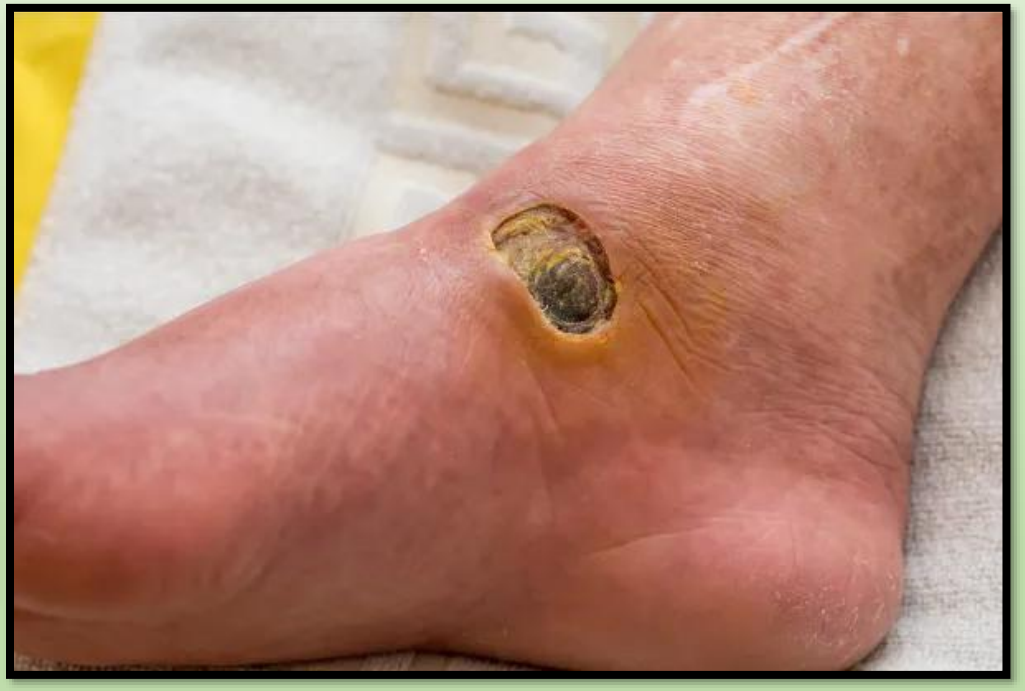
DISCUSSION POINTS:

- **What is the likely diagnosis, and what are the characteristic features of granulomatous inflammation? How we can confirm the specific diagnosis (etiology)**
- **How does the body attempt to contain the infection in granulomatous inflammation?**
- **What are the potential complications of granulomatous inflammation?**

CASE 4 (end of 4th week):

A 60-year-old diabetic patient presents with a non-healing foot ulcers. The wound has foul odor and purulent discharge. The patient has a history of peripheral vascular disease. Gross pictures shown.

GROSS APPEARANCE ON PHYSICAL EXAMINATION



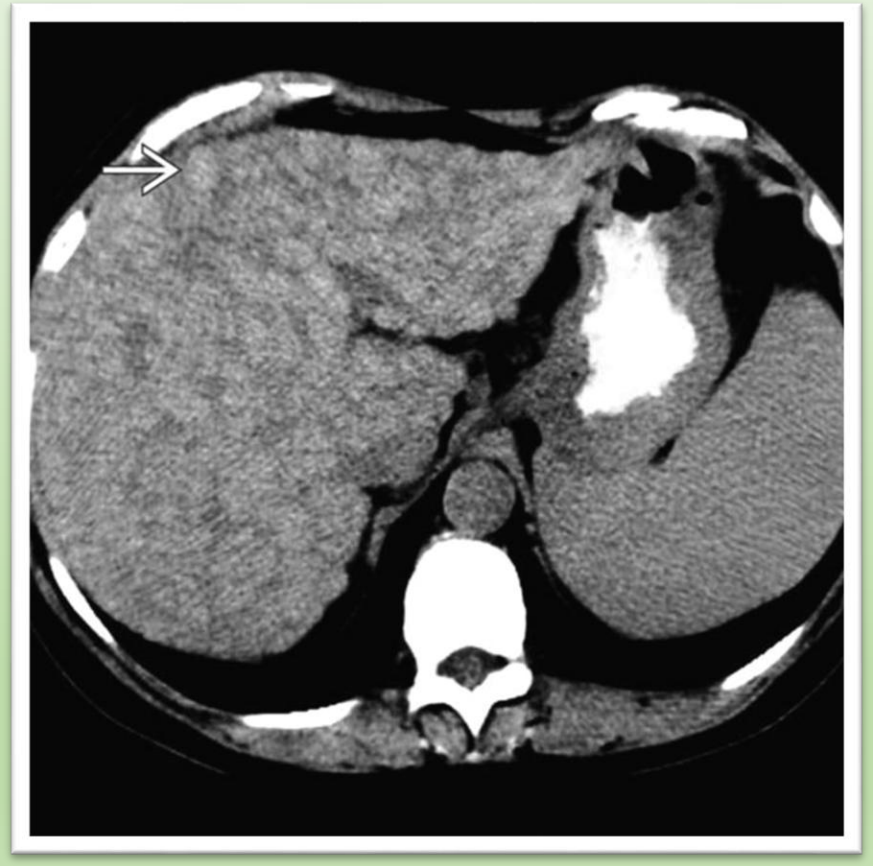
DISCUSSION POINTS:

1. What are the factors that impair wound healing in this patient?
2. How does diabetes affect the inflammatory response and wound healing?
3. What are the potential treatment options for this patient?

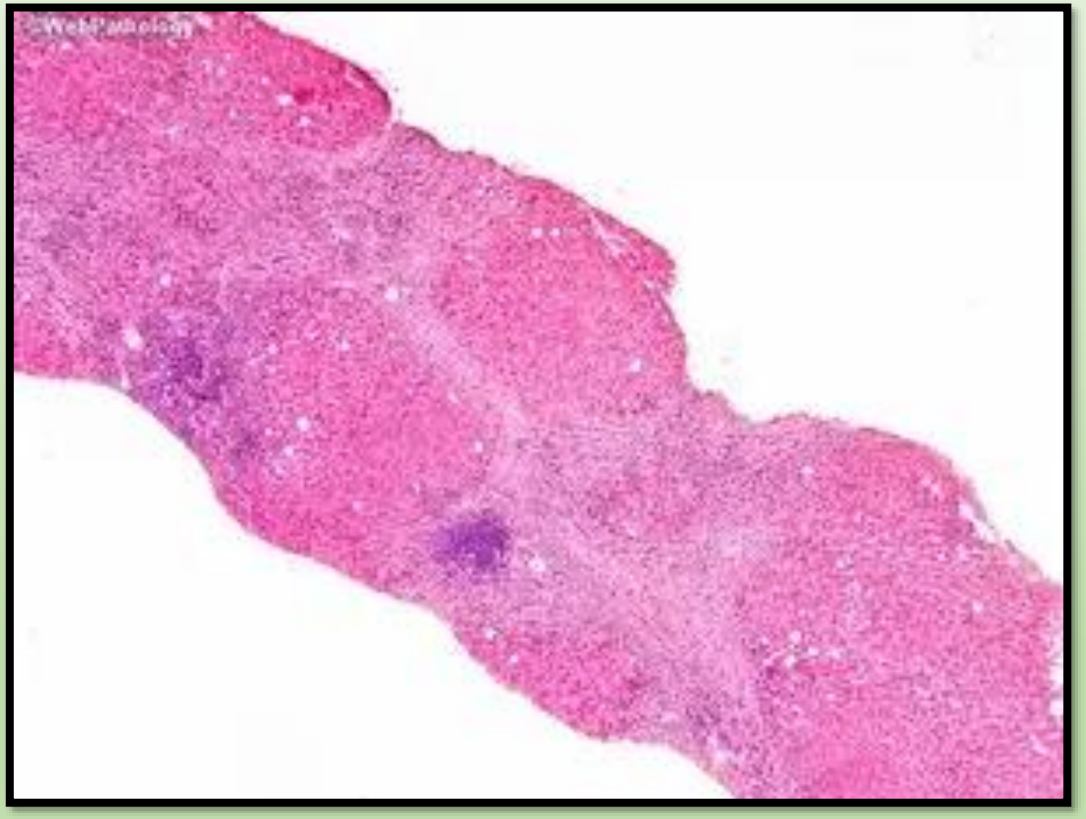
CASE 5 (end of 5th week):

A 55-year-old male with a history of chronic hepatitis C infection presents with abdominal distension, peripheral edema, and jaundice. Laboratory tests reveal elevated liver enzymes, low albumin levels, and a prolonged INR. CT scan and needle core biopsy are shown.

CT scan



Needle biopsy



DISCUSSION POINTS:

- **What is the pathogenesis of cirrhosis in this patient?**
- **How does cirrhosis lead to the patient's symptoms?**
- **What are the potential complications of cirrhosis?**