

Title: Piecing Together the Puzzle: Hepatic Abscess in a 16-Year-Old Female

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Introduction:

This case report will discuss a 16-year-old female who presented with abdominal pain, ultimately diagnosed with a hepatic abscess. Highlighting the importance of early detection and treatment, it underscores the critical role of timely intervention in preventing severe complications associated with hepatic abscesses. Although relatively rare in the pediatric population it is important for pediatricians to recognize the signs and symptoms concerning for a hepatic abscess. This case report aims to contribute to the medical literature by providing insights into the diagnosis and management of hepatic abscesses, thereby enhancing medical knowledge and improving patient care.

Case presentation:

16 year old female with a past medical history of a type 1 choledochal cyst s/p excision with roux en y hepaticojejunostomy revision at 4 years of age, chronic constipation, and mild persistent asthma who presented with acute on chronic RUQ and epigastric pain.

Initially in the emergency department, patient presented with 3 days of abdominal pain, fever, nausea, vomiting and headaches. Labs showed leukocytosis, elevated inflammatory markers, electrolyte imbalances (hyponatremia, hypokalemia) and direct hyperbilirubinemia with associated transaminitis. Initial imaging with RUQ ultrasound did not delineate the gallbladder and abdominal Xray was nonspecific for moderate stool burden. Patient admitted for bowel cleanout but abdominal pain and fevers persisted. Empiric antibiotics started due to concern for intrabdominal infection. Repeat RUQ US also did not reveal any abnormalities so MRCP was obtained. MRCP revealed mass measuring 9.3 x 7.0 x 7.8 cm in the right lobe of liver concerning for malignancy versus abscess. Ultrasound guided IR biopsy drained purulent fluid. Pathology results negative for malignancy. Patient continued to improve on antibiotics and was discharged home with 4-8 weeks of antibiotic treatment and close ID follow up.

Outcome:

Distinguishing between malignancy such as cholangiocarcinoma or hepatocellular carcinoma and an abscess initially posed challenges. However, as the patient responded positively to antibiotics and subsequent pathology results were negative, indicating no further purulent fluid upon repeat drainage, the diagnosis leaned towards hepatic abscess.

Conclusion:

This case highlights the diagnostic challenges and successful management of hepatic abscess in a pediatric patient. Through prompt recognition and treatment, including imaging-guided biopsy and antibiotic therapy, the patient experienced a favorable outcome. Clinicians should maintain a high index of suspicion for hepatic abscess in patients presenting with abdominal pain and fever, especially in those with predisposing factors such as prior choledochal cysts. Continued vigilance and early intervention are crucial in preventing complications and improving patient outcomes in such cases

Key words:

- 1. Hepatic abscess**
- 2. Choledochal cyst**
- 3. Imaging-guided biopsy**
- 4. Antibiotic therapy**