

LIVER

Tender Liver Mass

A 14-year-old boy underwent an appendectomy 10 days ago for a ruptured appendicitis with abscess formation. Despite antibiotic therapy, he has remained febrile and ill with an elevated blood count. The morning he complained of upper abdominal pain, and you noted a tender, vague upper abdominal mass with scleral icterus. A CT scan fails to reveal any evidence of an intraperitoneal abscess, but does show a mass in the right lobe of the liver.

Study Questions:

1. What is the likely diagnosis?
2. Discuss the pathogenesis of this lesion.
3. How would you confirm your suspected diagnosis?
4. How would you treat this lesion? Are there any alternatives?
5. How could this problem have been prevented?
6. Are there other causes of this type of lesion? Discuss differences in treatment (if any).

Massive Upper GI Bleeding

A 48-year-old known alcoholic presents at your emergency room having vomited a copious amount of blood. He is hypotensive and clinically jaundice with hepatosplenomegaly and spider angiomas. Rectal examination is negative with tarry, guaiac 4 + stool in the ampulla.

Study Questions:

1. What immediate therapeutic measures would you recommend?
2. What is the most likely cause of bleeding in the patient? What are the other possibilities? How would you determine the specific site and cause of bleeding? Is this important?
3. What is a Child's classification? How does it influence therapy?
4. Assuming the diagnosis of portal hypertension and bleeding esophageal varices secondary to nutritional cirrhosis of the liver and moderately well-preserved liver function, what immediate and definite courses of treatment would you recommend? What are the various alternatives?
5. Describe the various types of operations that have been commonly used in this situation. What are the advantages and disadvantages of each?
6. Would a platelet count of 54,000/ml influence your treatment? The presence of ascites? Severe encephalopathy?
7. What is the overall prognosis?

LIVER (cont'd)

Intractable Ascites

A 56-year-old patient of yours with cirrhosis has gradually developed massive ascites despite medical treatment with a low-salt diet and diuretics. He is admitted to the hospital for further evaluation and treatment.

Physical examination reveals tense ascites, a protuberant umbilical hernia filled with fluid, moderate muscle wasting, and minimal jaundice. Laboratory studies show a bilirubin of 2.6 m/dl, albumin of 2.2 gm/dl, blood urea nitrogen (BUN) of 80 mg/dl, creatinine of 4/2 mg/dl, and normal coagulation studies.

After 2 weeks of intensive in-hospital therapy, his weight and ascites are unchanged and his creatinine is now 5.6 mg/dl.

Study Questions:

1. Describe the pathophysiology of ascites in advanced liver disease.
2. What is the hepatorenal syndrome? Does this patient have it?
3. In view of the failure of medical therapy, is there any surgical procedure available?
4. What are the complications of operative treatment? How would you best avoid or treat them?
5. What is the overall prognosis of patients with this condition with or without surgery?
6. What is the significance of the umbilical hernia?
7. If this patient should die, could he be considered as a kidney donor for transplantation? Why?

Hepatomegaly

The patient is a 47-year-old former alcoholic who was diagnosed as having cirrhosis of the liver 10 years ago, and since then has completely abstained from alcohol. Since then he has done well until about 3 months ago, when he began to feel weak and tired and was recently noted to be jaundiced. His primary physician noted a newly enlarged liver, and a liver-spleen scan showed a mass in the right lobe of the liver. He is referred to you for advice and treatment.

Study Questions

1. What is your differential diagnosis?
2. What further studies would you suggest to determine the etiology of this lesion?
3. What form of treatment would you suggest?
4. List the major primary and secondary tumors of the liver and their treatment.

LIVER (cont'd)

Hepatomegaly (Continued)

5. Describe the segmental anatomy of the liver and its importance in liver resection.
6. What are the major complications of liver resection, and how can they be treated?

LIVER

Objectives

1. Define portal hypertension and discuss its etiology.
2. Describe five clinical manifestations and/or complications of portal hypertension, as well as diagnostics modalities use to confirm them.
3. Outline the treatment methods available for variceal hemorrhage, both acutely and for the stable patient; include a discussion of the portosystemic shunts, their advantages and disadvantages.
4. Describe the medical and surgical treatment of a patient with ascites.
5. Describe the presentation and treatment of a patient with hepatic encephalopathy.
6. Describe the two most common types of primary hepatic cancer and approaches to their diagnosis and treatment.
7. Describe the three most common benign tumors of the liver.
8. Describe the medical and surgical therapies for GI tumors metastatic to the liver.
9. Describe three infectious etiologies of liver abscess, as well as presenting symptoms and signs; contrast the diagnostic and therapeutic approaches to treatment of liver abscesses.
10. Describe the characteristics and treatment of an amebic and echinococcal liver cyst.