Lower gastrointestinal bleeding in children: Diagnosis and management.

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Abstract

Biliary stenosis may represent a diagnostic and therapeutic challenge resulting in a delay in diagnosis and initiation of therapy due to the frequent difficulty in distinguishing a benign from a malignant stricture. In such cases, the diagnostic flowchart includes the sequential execution of imaging techniques, such as magnetic resonance, magnetic resonance cholangiopancreatography, and endoscopic ultrasound, while endoscopic retrograde cholangiopancreatography is performed to collect tissue for histopathological/cytological diagnosis or to treat the stenosis by insertion of stent. The execution of percutaneous transhepatic drainage with subsequent biopsy has been shown to increase the possibility of tissue diagnosis after failure of the above techniques. Although the diagnostic yield of histopathology and imaging has increased with improvements in endoscopic ultrasound and peroral cholangioscopy, differential diagnosis between malignant and benign stenosis may not be easy in some patients, and strictures are classified as indeterminate. In these cases, a multidisciplinary workup including biochemical marker assays and advanced technologies available may speed up a diagnosis of malignancy or avoid unnecessary surgery in the event of a benign stricture. Here, we review recent advancements in the diagnosis and management of biliary strictures and describe tips and tricks to increase diagnostic yields in clinical routine.

Keywords: Biliary stenosis, Cholangioscopy, Metal stent, Endoscopic ultrasound, Endoscopic ultrasound-guided fine needle aspiration, Biliary stenosis treatment

Introduction

The diagnosis and management of bile leaks after hepatectomy are heterogeneous because there is no agreement on the definition of post-hepatectomy biliary fistula. The aim of this study was to validate our definition and management of biliary fistulas after hepatic resection and to compare our results with those proposed by other authors. Biliary atresia is a progressive obstructive cholangiopathy and is fatal if left untreated within 2 years of life. Delay in referral is because of difficulties in differentiating it from physiologic jaundice and identifying an abnormal stool color. This paper presents an overview on the diagnosis and discusses the current strategies in the management of this disease in developing countries [1].

He echinococcoses are chronic, parasitic diseases that are acquired after ingestion of infective taeniid tapeworm eggs from certain species of the genus *Echinococcus*. Cystic Echinococcosis (CE) occurs worldwide, whereas, Alveolar Echinococcosis (AE) is restricted to the northern hemisphere, and Neotropical Echinococcosis (NE) has only been identified in Central and South America. Clinical manifestations and disease courses vary profoundly for the different species of Echinococcus. CE presents as small to large cysts, and has commonly been referred to as 'hydatid disease', or 'hydatidosis'. A structured stage-specific approach to CE management, based on the World Health Organization (WHO) ultrasound classification of liver cysts, is now recommended. Management options include percutaneous sterilization techniques, surgery, drug treatment, a 'watch-and-wait' approach or combinations thereof. In contrast, clinical manifestations associated with AE resemble those of a 'malignant', silently-progressing liver disease, with local tissue infiltration and metastases [2].

Bacterial infection that occurs in the setting of biliary obstruction can lead to acute cholangitis, a condition characterized by fever, abdominal pain and jaundice. Choledocholithiasis is the most common cause of acute cholangitis and is often associated with bacterial infection and colonization in addition to biliary obstruction. Iatrogenic introduction of bacteria into the biliary system most commonly occurs during endoscopic retrograde cholangiopancreatography in patients with biliary obstruction. The majority of patients with acute cholangitis respond to antibiotic therapy, but endoscopic biliary drainage is ultimately required to treat the underlying obstruction. Acute cholangitis is often diagnosed using the clinical Charcot triad criteria; however, recommendations from an international consensus meeting in Tokyo produced the most comprehensive recommendations for the diagnosis and management of acute cholangitis. These guidelines enable a more accurate diagnosis of acute

cholangitis than do earlier methods, and they facilitate the classification of disease as mild, moderate or severe [3].

Cystic echinococcosis is endemic in certain parts of the world. The growth of the cyst is often slow, and the liver and lungs are the most frequently involved organs. Diagnosis is based on clinical signs and symptoms and epidemiological data, while ultrasonography is important for the classification of hydatid cysts. Although certain types of hydatid cysts are successfully treated by percutaneous aspiration, injection, and reaspiration, surgery remains the treatment of choice. We reviewed the current trends in the diagnosis and management of cystic echinococcosis, with special emphasis on hepatic and pulmonary involvement [4,5].

Conclusion

Cholangiocarcinomas (CCAs) are tumors that develop along the biliary tract. Depending on their site of origin, they have different features and require specific treatments. Classification of CCAs into intrahepatic, perihilar, and distal subgroups has helped standardize the registration, treatment, and study of this lethal malignancy. Physicians should remain aware that cirrhosis and viral hepatitis B and C are predisposing conditions for intrahepatic CCA. Treatment options under development include locoregional therapies and a chemotherapy regimen of gemcitabine and cisplatin. It is a challenge to diagnose perihilar CCA, but an advanced cytologic technique of fluorescence in situ hybridization for polysomy can aid in diagnosis. It is important to increase our understanding of the use of biliary stents and liver transplantation in the management of perihilar CCA, as well as to distinguish distal CCAs from pancreatic cancer, because of different outcomes from surgery. We review advances in the classification, diagnosis, and staging of CCA, along with treatment options.

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