Acute Suppurative Necrotizing Pancholangitis
A Case Report

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Key Words
Biliary system • Endoscopic retrograde cholangiogram • Cholangitis • Common bile duct • [A1]

Abstract
Objective: To present a case of ascending cholangitis with resulting necrosis of the biliary system with perforation.
Clinical Presentation and Intervention: A 40-year-old male patient presented with upper abdominal pain, fever and jaundice assessed clinically and investigated by laboratory and radiological tests. Endoscopic retrograde cholangiogram and surgery were performed. However, because of extensive suppurative pancholangitis involving most of the intrahepatic radicles, sound surgical drainage could not be accomplished. Unfortunately, the patient died 2 days after surgery. Conclusion: In this case of severe cholangitis, endoscopic and surgical interventions were not successful and might have contributed to the worsening of the condition.

Introduction
Biliary tract infection remains a cause of morbidity and at times mortality, despite major advances in management such as the use of new antibiotics [1]. Cholangitis is an infection of the biliary duct that occurs especially when there is an obstruction and usually improves with the use of appropriate antibiotics and after definitive surgery [2]. Occasionally, surgeons face an unusual case that deteriorates despite all interventions and may rapidly lead to a fatal outcome. We present such a case of acute necrotizing pancholangitis involving perforation of the biliary system.
Bacterial cholangitis is linked to intermittent obstruction due to biliary sludge in the CBD; recurrent passage of biliary sludge may precipitate obstructive inflammation and even fibrosis of Vater’s ampulla and thus precipitate attacks of acute cholangitis [9]. Medical therapy with supportive measures and appropriate antibiotics are successful in 85% of patients with acute cholangitis [10]. For patients in whom initial management is not successful, biliary drainage is a life-saving procedure [11] and can be achieved either endoscopically, percutaneously or surgically. Endoscopic sphincterotomy was found to be associated with a complication rate of 28%. Surgical intervention, however, was associated with a complication rate of 58%. In addition, the mortality rate following endoscopic drainage is 5%, compared to 21% after surgical drainage [12]. Lai et al. [13] found a mortality rate of 10% in the endoscopic drainage group, compared to 32% in the operative group. Accordingly it is generally accepted that emergency operative decompression of the biliary tract should be reserved for patients who do not respond to adequate medical therapy or nonoperative drainage [14].

The case presented here is unique because of the magnitude of necrosis as well as the multiple perforations in the CBD and CHD, which involved all of the intrahepatic and extrahepatic biliary radicles with complete slough and gangrene. The multiple perforations in the biliary system might have contributed to the infection. It is also possible that in addition to Pseudomonas, there might have been other virulent organisms that failed to grow in culture. Medical and endoscopic therapy failed to improve the symptoms of cholangitis, and in fact it is probable that endoscopy contributed to the worsening of the condition due to excessive manipulation and possibly the introduction of resistant nosocomial organisms in the already infected and compromised biliary tree, thereby leading to death as previously reported [12, 13]. This case taught us a hard lesson not to push the patient for repeat ERC if there is no demonstrable obstruction from the first investigation.

Conclusion

The magnitude of the necrotizing pancholangitis that involved perforation of the biliary system was so great that neither endoscopic nor surgical decompression was successful. The timing of open surgical intervention in such a case of supplicative pancholangitis remains a difficult decision.
Acute Pancholangitis

References