

ABSTRACT

Endoscopic treatment of biliary tract complications after Roux-en-Y surgery is still a challenge. With balloon enteroscopy, we can reach previously inaccessible areas changing the management of biliopancreatic diseases in patients with surgically altered anatomy. We report a case of single-balloon enteroscopy plus endoscopic retrograde cholangiopancreatography for the treatment of a pinpoint stricture in a hepaticojejunal anastomosis after liver transplantation.

The re-establishment of the biliary tract during hepatic transplantation or after iatrogenic injury is frequently performed by hepaticojejunalostomy using a jejunal inclusion loop (Roux-en-Y anastomosis). If anastomotic stenosis of the common bile duct occurs, endoscopic treatment can be performed. However, conventional endoscopy cannot reach the site of anastomosis in the common bile duct due to the length of the excluded loop. Single or double-balloon enteroscopy represents a breakthrough in diagnostic and therapeutic methods, allowing access to previously unapproachable regions such as the excluded Roux-en-Y jejunal loop. Herein we have report a case in which single balloon enteroscopy was used to treat a biliodigestive anastomotic stenosis in a patient with biliary tree injury after liver transplantation with a hepaticojejunalostomy performed with excluded Roux-en-Y jejunal loop.

CASE REPORT

A 42-year-old patient from Paraná state underwent a hepatic transplantation to treat secondary biliary cirrhosis caused by a biliodigestive anastomotic stenosis, performed to restore an iatrogenically injured bile duct during cholecystectomy. Biliary reconstruction with a Roux-en-Y anastomosis (Fig 1), showed a satisfactory postoperative outcome with normalization of canicular enzymes. During the postoperative period of 7 years and 11 months, an increased gamma glutamyl transferase level was observed with normal total bilirubin levels and an absence of biliary dilatation on Doppler ultrasound examination. Biliary duct scintigraphy 99-technetium labeled iminodiacetic acid documented a delay in biliary emptying, with a diagnosis of biliodigestive anastomotic stenosis. We opted for anastomotic dilation through enteroscopic placement of a biliary prostheses using single-balloon enteroscopy to place a 7-Fr prostheses (Fig 2, 3, and 4). After dilation, we observed adequate emptying of the biliary tract (Fig 5).
DISCUSSION

Bile duct strictures are the most common biliary complication after liver transplantation with an incidence ranging between 4% to 16%.\textsuperscript{1,3} The effectiveness of dilatation of biliary structures using a balloon with prosthesis placement has been shown in some studies, varying from 50% to 91%.\textsuperscript{2,4} Enteroscopy has been performed under general anesthesia, lasting for 50 minutes. Our patient was discharged after 2 days without complications related to the procedure.

CONCLUSION

The use of enteroscopy in the treatment of Roux-en-Y choledochojunostomy stenosis after liver transplantation showed satisfactory results, rendering enteroscopy a first-choice therapeutic option in this situation.

REFERENCES