Endoscopic treatment of biliary enteric fistula

Thomas Marshall, Kayvan Kamalvand, Stuart R Cairns

Royal Sussex County Hospital, Brighton BN2 5BE
Thomas Marshall, MB, *house physician*
Kayvan Kamalvand, MB, *medical registrar*
Stuart R Cairns, MD, *consultant physician*

Correspondence to: Dr Cairns.

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Endoscopic management is becoming the preferred treatment for the many patients with benign or malignant biliary disease.[1] We recently saw a patient who presented with the unusual problem of stones in the common bile duct and a cholecystocolic fistula causing profuse diarrhoea. Such a patient would usually be treated by cholecystectomy and excision of the fistula, which is often difficult and hazardous. We report what we believe to be the first case in which non-operative management of this condition was successful.

Case report

An 86 year old man presented with a three month history of profuse watery diarrhoea, mild infrequent epigastric discomfort, and weight loss of 15 kg. He was frail but did not have jaundice or a fever. The liver was tender but not enlarged. Sigmoidoscopy showed a normal rectal mucosa. Results of liver function tests were normal. Double contrast barium enema showed a fistula between the transverse colon and the neck of the gall bladder with air in the intrahepatic biliary tree (figure (*A*)). Endoscopic retrograde cholangiography showed that the intrahepatic and extrahepatic biliary tree was dilated and contained numerous large stones and a cholecystocolic fistula (figure (*B*)).

Endoscopic biliary sphincterotomy was done, but the duct could not be cleared because some stones were large (>1·5 cm in diameter). Two 10 cm polyethylene stents (7 French gauge) were placed within the bile duct to ensure good biliary drainage.[2] This procedure was complicated by mild pancreatitis, which resolved within 48 hours. The patient was fit for discharge within two days and thereafter did not have diarrhoea. Two months later he underwent a second endoscopy, when the bile duct was cleared and the fistula seen to have healed (figure (*c*)). There were no complications, and he was discharged the next day. On review three months after the second procedure he was well and his weight had returned to normal.

Comment

Spontaneous biliary fistulas are usually the result of an acute suppurative cholecystitis; they usually drain into the duodenum but more rarely drain into the colon, stomach, bronchial tree, or even urinary tract.[3,4] We believe that our patient had a persistent fistula because stones in the common duct had blocked the normal flow of bile through the papilla of Vater. This condition is usually treated by cholecystectomy and excision of the fistulous tract, a hazardous and difficult procedure because of adhesions and the associated inflammation. Endoscopic retrograde cholangiography showed the site and cause of the fistula in our patient, and endoscopic sphincterotomy and the insertion of stents allowed bile to flow through the papilla; the diarrhoea stopped immediately and the fistula healed.

Therapeutic biliary endoscopy is now generally recognised as the treatment of choice for many disorders of the bile duct but to our knowledge has not been reported for biliary enteric fistulas. We were able to avoid the dangers of general anaesthesia and surgery and believe that endoscopic treatment should be considered for other, similar cases.

We thank Mr P Farrands for referring the patient.

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3 Borman CN, Rigler LK. Spontaneous internal biliary fistula and gallstone obstruction. *Surgery* 1937;**1**:349-78.
4 Glenn F, Reed C, Grafe WR. Biliary enteric fistula. *Surg Gynecol Obstet* 1981;**153**:527-31.

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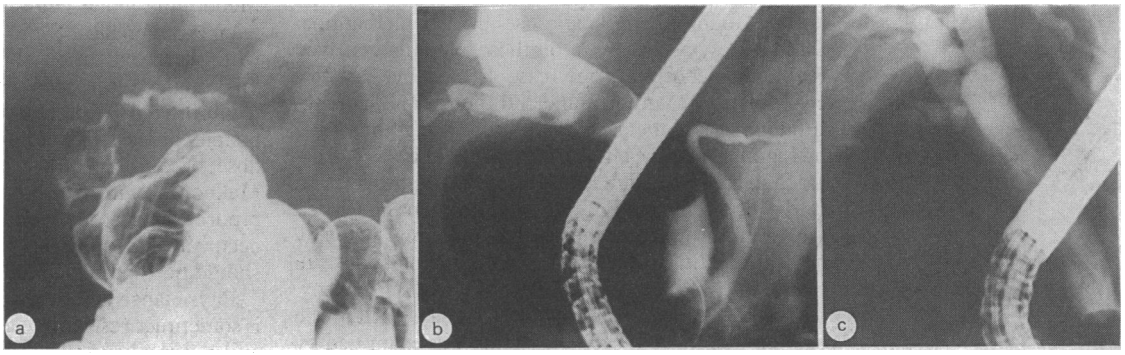

(a) Fistula between transverse colon and neck of gall bladder evident after double contrast barium enema; (b) numerous large stones and cholecystocolic fistula evident on endoscopic cholangiography; (c) fistula healed two months after endoscopic removal of stones

ONE HUNDRED YEARS AGO

The recent action of the London School Board in sanctioning an organisation for the feeding of school children has drawn a very reasonable and timely remonstrance from the Charity Organisation Society, which criticises the policy and methods of relief proposed. The points in the action of the Board most open to criticism are the lack of accurate statistics, and a want of consideration of the causes of ill-feeding which they endeavour to palliate, not to prevent. The argument that parents are too poor to feed their children because they do not pay the school fees may be met by the inverse argument that remission of fees is an encouragement to ask for dinners for the children, and a wholesale supply of food. To start free feeding is to attract poverty to the neighbourhood, and though dock labourers are paid 10 per cent. more than formerly, and many others in proportion, still in South London the demand for free dinners has increased in three years from 251,000 to 498,000. By all means let every endeavour be made to supply dinners when wanted on a commercial basis, but past experience has shown that free distribution of food increases the permanent distress. By wise continuous pressure, the amount of pauperism has been diminished; the Charity Commissioners have withdrawn about £50,000 a year from parochial doles, which encouraged pauperism, and that sum is available for removing some of the permanent causes of poverty, such as want of technical instruction and the want of means of recreation, which has so largely led to intemperate habits. To endeavour to provide free feeding for 43,000 children sounds like kindness at this Christmas season, but if carried into practice will assuredly increase existing evils. Let the cases of poverty be searched for, and when possible removed; individual cases of distress may be dealt with, but to give free meals is not the work of a purely educational body such as the School Board. (*British Medical Journal* 1890;i:91)