Hemorrhagic complications following endoscopic retrograde cholangiopancreato-
graphy (ERCP) are generally manifest as gastrointestinal hemorrhage, and pub-
lished studies report an incidence of 0.8% to 4% [1,2].
Intrahepatic bleeding as a complication of ERCP has not been reported previously,
although guide wire perforation of the biliary tree resulting in intrahepatic bil-
oma and intraperitoneal bleeding from gastroduodenal, pancreaticoduodenal, and
hepatic arteries has been described [3–5]. This case illustrates an unreported
complication of ERCP resulting in significant morbidity.
A 51-year-old female presented with right-sided abdominal discomfort, and
tender hepatomegaly extending to the right iliac fossa 3 months after an ERCP
for a retained common bile duct stone and jaundice. Following duct cannulation
and contrast injection, a tracer guide wire was maneuvered past the stone, and a
1 cm sphincterotomy was carried out, and the stone retrieved following a single
balloon trawl. The patient had normal hematological and clotting parameters. Fol-
lowing the procedure the patient developed right upper abdominal pain and col-
lapsed requiring intensive resuscitation. Hyperamylasemia was absent. An urgent
computed tomography (CT) scan revealed a large collection (10 cm × 13 cm) consistent
with a hematoma within the lateral infraposterior aspect of the right lobe of the
liver. Ultrasound-guided drainage of blood was performed with a pigtail cath-
eter. Ultrasonographic monitoring was performed at 1 and 3 months, revealing an
increase in size of the hematoma from 17 × 15 × 9 cm to 23 × 18 × 16 cm serially.
Contrast-enhanced CT was performed and showed the lesion to be entirely in-
trahepatic (Figure 1). Under ultrasound guidance, 5600 ml of bile-free liquid he-
matoma was drained percutaneously, with successful resolution at 3 months of
follow up. This case was managed successfully using a percutaneous drainage;
however, this approach does raise the possibility of further hemorrhage follow-
ing drainage, and is only recommended where facilities for embolisation and sur-
gery exist.

C. S. Bhati, N. Inston, S. J. Wigmore
Liver Unit, Queen Elizabeth Hospital,
Birmingham, United Kingdom

References
1 Ong TZ, Khor JL, Selamat DS et al. Complica-
tions of endoscopic retrograde cholangiog-
raphy in the post-MRCP era: a tertiary cen-
ter experience. World J Gastroenterol 2005;
11: 5209–5212
2 Loperfido S, Angelini G, Benedetti G et al. Ma-
jor early complications from diagnostic and
therapeutic ERCP: a prospective multicen-
tre study. Gastrointest Endosc 1998; 48: 1–10
3 Boujouade J, Pelletier G, Fritzch J et al. Man-
gagement of clinically relevant bleeding fol-
lowing endoscopic sphincterotomy. Endos-
copy 1994; 26: 217–221
4 Liu TT, Hou MC, Lin HC et al. Life-threatening
hemobilia caused by hepatic artery pseudo-
aneurysm: a rare complication of chronic cholangitis. World J Gastroenterol 2003; 9:
2883–2884
5 Al-Jeroudi A, Belli AM, Sharvon PJ. False an-
eurysm of the pancreaticoduodenal artery
complicating therapeutic endoscopic retro-
grade cholangiopancreatography. Br J Radi-
ol 2001; 74: 375–377

Bibliography
Endoscopy 2007; 39: E150
© Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X

Corresponding author
S. J. Wigmore, MD
The Liver unit
Nuffield house
Queen Elizabeth hospital
Edgbaston
Birmingham B15 2TH
UK
Fax: +44-121-4158701
s.wigmore@bham.ac.uk

Figure 1 Large subcapsular intrahepatic hematoma after endo-
sopic retrograde cholangiopancreatography.