

Arterial bleeding after endoscopic papillary large balloon dilation without endoscopic sphincterotomy for bile duct stones successfully treated by endoscopic hemostatsis

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Case report

A 71 years old man was referred to our department due to acute cholangitis. He had a history of endoscopic sphincterotomy (EST) and removal for bile duct stones. CT revealed multiple stones in the markedly dilated bile duct. Biliary cannulation using a conventional catheter was difficult due to a stenosis of the orifice. After successful wire-guided cannulation, endoscopic papillary large balloon dilation (EPLBD) was

performed with a balloon catheter (GIGA balloon, Century Medical, Inc., Tokyo, Japan). The orifice was dilated up to 17mm in diameter. Massive arterial bleeding occurred immediately after gradual balloon deflation. The balloon was re-inflated. Although balloon hemostasis continued for 15 minutes, arterial bleeding at the terminal end of the bile duct was observed. Local injection of hypertonic saline epinephrine (HSE, 0.5mL × 10 times) was successfully performed for hemostasis. Next day, duodenoscopy revealed a vessel, which was cauterized using argon plasma coagulation (APC) with a power setting of 40 W and a gas flow of 0.4 L/min. Bile duct stones were removed with a basket/balloon catheter three days later, and the patients was discharged.

EPLBD has been developed for the treatment of difficult cases such as large/multiple stones [1,2]. This method enables achievement of a sufficiently large opening of the orifice of the bile duct, which helps decrease the difficulty in stone removal and reduces the procedure time [3]. Bleeding after EST followed by EPLBD has been reported to occur in 5.9% [4]. The bleeding of EPLBD itself is thought to be extremely rare [4,5]. Local injection of HSE is useful for hemostasis after EST [6]. Although placement of a covered metal stent has been also reported to be effective for hemostasis after EPLBD following EST, the methodology has not been established. The present case can demonstrate the usefulness of HSE injection and APC for hemostasis after EPLBD without EST (Figures 1 and 2).

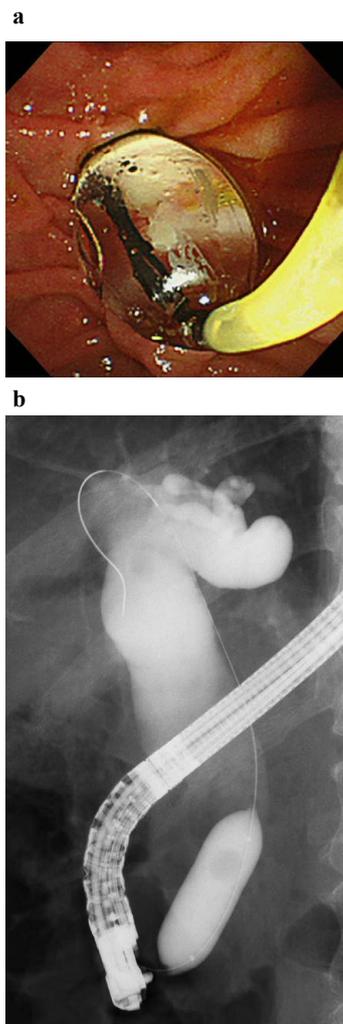


Figure 1. (a, duodenoscopy; b, cholangiography) EPLBD using a balloon catheter was performed.

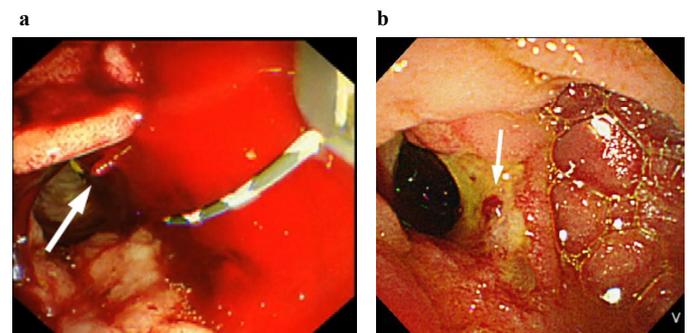


Figure 2. (duodenoscopy)

Arterial bleeding was observed at the terminal end of the bile duct (a, arrow). Next day, duodenoscopy revealed a vessel (b, arrow), which was cauterized using APC.

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