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## A Novel Method of Obtaining Contrast-Free Bile while Performing Endoscopic Retrograde Cholangiography

There are various methods of collecting bile in humans. Recently, Schutz et al. (1) have described a new method of obtaining fresh bile while performing endoscopic retrograde cholangiography (ERC). However, by their method, there are chances that air may enter the catheter and the bile duct when contrast is injected (2). We describe a novel method of collecting pure bile while performing ERC during the same cannulation.

A triway is connected to the injection port of a bullet-tipped ERCP catheter. A 20-ml disposable syringe is attached to one of the ports of the triway and a 50-ml syringe containing contrast material is attached to the other injection port (Figure **1**).

The papilla is cannulated with the ERCP catheter with the stylet in place. The knob of the triway is rotated so that the port to which the 50-ml syringe is attached is closed while the port to which the 20-ml syringe is attached is open. The catheter is advanced a little and suction applied to the 20-ml syringe to aspirate pure bile. When adequate quantity of bile has been aspirated, suction is applied to the 50-ml syringe and the knob of the triway is turned so that the injection port of the 20-ml syringe closes and that of the 50-ml syringe opens. The 50-ml syringe is turned upside-down and contrast is injected to achieve air-free cholangiograms. If there was inadvertent cannulation of the pancreatic duct and pancreatic juice was aspirated, the entire assembly was discarded and the papilla was recannulated using a fresh assembly.

We have successfully performed ERCs using this procedure. There have been no complications. Inadvertent cannulation of the pancreatic duct or the cystic duct was not a problem. At our center we do not have an image intensifier. However, since 1990, we have been performing diagnostic as well as therapeutic ERCP procedures (3). For sphincterotomy and biliary stenting, we aspirate bile to confirm the position of the ERCP catheter. We have been using the conventional blunt-tipped ERCP catheter. We have successfully placed single as well as multiple biliary endoprostheses in patients with benign and malignant biliary obstruction (4, 5).

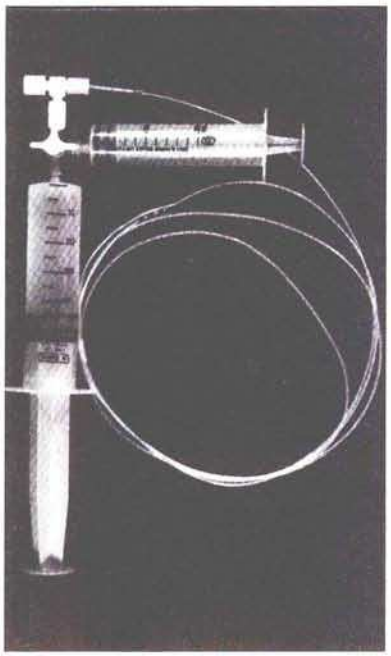

**Figure 1:** The assembly used for obtaining contrast-free bile during endoscopic retrograde cholangiography.

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### References

1. Schutz SM, Fitz JG, Branch MS, Baillie J. A new way to obtain contrast-free bile during ERCP. Gastrointest Endosc 1996; 43: 231–2.
2. Misra SP, Dwivedi M. Obtaining contrast-free bile during ERCP. Gastrointest Endosc 1997; 45: 110–1 (letter).
3. Misra SP, Agarwal SK, Gupta A. Endoscopic sphincterotomy, nasobiliary drainage and biliary stent placement without image intensification. Br J Surg 1992; 79: 1179–80.
4. Misra SP, Dwivedi M. Biliary endoprosthesis placement as an alternative to endoscopic nasobiliary drainage in patients with acute cholangitis. Endoscopy 1996; 28: 746–9.
5. Misra SP, Dwivedi M. A new time-saving technique of inserting multiple biliary endoprosthesis without fluoroscopy. Endoscopy 1997; 29: 58.

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