

READERS OPINION

The detection of cysto-biliary communications during surgery for liver hydatid cysts: let's speak the unspoken

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We read with great interest the article by Kayaalp et al. (1), whose work identified biliary orifices using a bile test and described the use of suturing cysto-biliary communications to reduce postoperative biliary complications significantly following hydatid liver surgery. We would like to express our opinion that testing using the injection of normal saline into the biliary system has several disadvantages based on three important concerns. First, normal saline is colorless, and in some cases, small or hidden cysto-biliary communications may not be detected. Why did the authors not use a colored agent, such as methylene blue? Second, small daughter cysts and minor fragments of cysts in the biliary tree may not be detected by injecting normal saline. How did the authors evaluate the whole biliary tree in patients with cysto-biliary communications? Third, in some cases, especially for deep cysts with multiple connections, the whole cavity may not be observable by the naked eye using a colorless agent. How did the authors evaluate the cyst cavities in these patients?

During routine surgical practice, we prefer injecting water-soluble contrast media and using cholangiography in patients with suspected cysto-biliary communications (Figure 1). If we detect leaks using cholangiography, we can inject methylene blue into the biliary system to find hidden orifices (2). There are certain advantages to using this technique. First, the surgeon can see the location and the diameter of the cysto-biliary communications and understand the severity of the problem. Second, using cholangiography, small daughter cysts or minor fragments of endocysts in the biliary tree can be detected. Third, hidden biliary-thoracic communications can be visualized. Fourth, the use of cholangiography may prevent the complete suture capture and occlusion of biliary branches when suturing cysto-biliary communications.

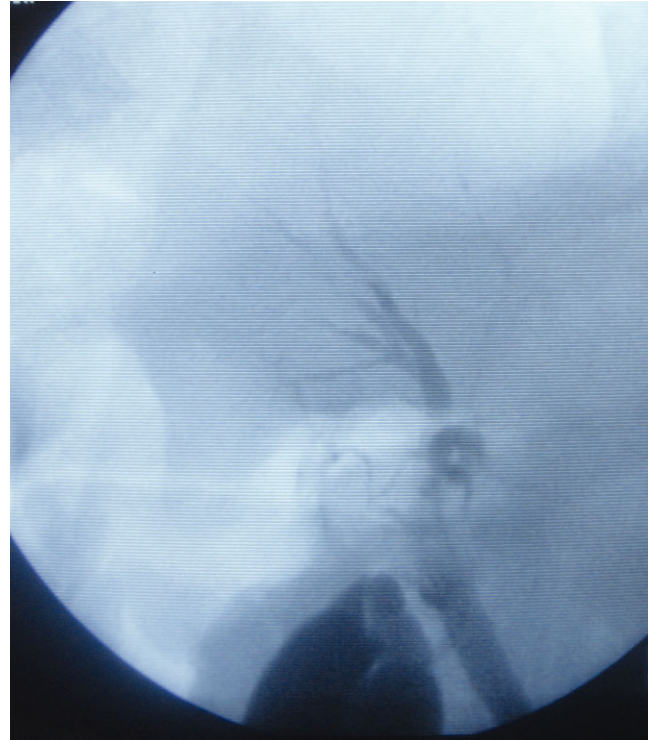


Figure 1 - Intraoperative transcystic cholangiography.

REFERENCES

1. Kayaalp C, Aydin C, Olmez A, Isik S, Yilmaz S. Leakage tests reduce the frequency of biliary fistulas following hydatid liver cyst surgery. *Clinics*. 2011;66(3):421-4, <http://dx.doi.org/10.1590/S1807-59322011000300010>.
2. Atahan K, Küpeli H, Deniz M, Gür S, Çökmez A, Tarcan E. Can occult cystobiliary fistulas in hepatic hydatid disease be predicted before surgery. *Int J. Med. Sci.* 2011;8(4):315-20.

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