

Bile Leakage Test After Surgery for Hepatic Hydatidosis: An Old But Still Mandatory Method to Avoid Biliary Fistula

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ABSTRACT

Hydatid cyst of the liver is part of hepatic surgery in which the check of bile leakage is mandatory to avoid severe complications. The bile leakage test using air bubbles, leaves the surgical field with natural colours and especially in case of identification of multiple holes, results in safer application compared to methylene blue.

Key words: hepatic hydatidosis, bronchobiliary fistula

BACKGROUND

The bile leakage test is an important step in hepatic surgery to avoid biliary complication in the postoperative period. The methylene blue is still the most commonly used approach but if not used well can make the recognition of biliary fistulas difficult.

LETTER TO THE EDITORS

We read with great interest the article of Cicek and co-workers (1) concerning the role of bile leakage test during surgical treatment of bronchobiliary fistula due to hydatid cyst. The authors describe a case of a patient affected by this disease and conclude that the bile leakage test for this condition is describe for the first time in the literature.

The bile leakage test is a fundamental step in hepatic surgery to avoid any related complication in the postoperative period. Hydatid cyst of the liver is part of hepatic surgery in which the check for bile leakage is mandatory to avoid severe complications.

This technique have been described previously by our team in a similar case (2) in which the bile leakage test have been adopted to cure a complication that was active for many years. The only difference was the use of air bubbles. This method is safer compared to the metilene blue as inadvertent spreading of the

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dye over the entire surgical field turns the identification of fistulas difficult, in particular in case of multiple fistulas. On the opposite air bubbles leave the surgical field clean and especially in case of identification of multiple holes enable identification of each fistula more easily.

Of course the methylene blue can be used. However, we recommend to reserve this method for all failures of the air bubble test.

REFERENCES

1. Cicek E, Koc C, Sahin T, Gokler C, Aktas A, Kayaalp C, et al. Bronchobiliary fistula due to hydatid liver cyst and role of bile leakage test during surgical treatment. *Surg Gastroenterol Oncol* 2019;24(1):56-60.
2. Di Carlo I, Sparatore F, Pavia R, Toro A, Tornambene F, Nicolosi M. Biliobronchial fistula 20 years after surgery for hepatic hydatid disease. *ANZ J Surg* 2008;78:305-6.