Role of T Tube Placement in Open Common Bile Duct Explorations

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Dear Sir,

I read the article entitled “Open Common Bile Duct Exploration without T-Tube Insertion—Two Decades Experience from a Limited Resource Setting in the Caribbean” authored by Narayansingh V et al. in Indian Journal of Surgery (May–June 2010) 72:185–188.

The article gives a confusing picture regarding the usage of T tube in open CBD exploration. The authors have made self-contradictory and conflicting statements pertaining to the procedure. The purpose of the study is unclear. I would like to know what made the authors take this revolutionary measure of not using a T tube for all the open CBD explorations which they performed.

Open biliary tract surgery is far from having become obsolete. It is still the final answer to failed or messed up laparoscopic or endoscopic biliary tract procedures. The authors have cited cost as a reason for not using a T tube. Citing the long-term morbidity of T tube in a few select cases would have been an acceptable justification but cost is not.

The selection criteria for CBD exploration are unclear. There is no mention of the diagnostic radiological imaging method used either preoperatively or intraoperatively before exploring the CBD. As a result five cases had a negative CBD exploration which is unacceptable by all standards.

USG has limited sensitivity and specificity for accurately diagnosing CBD calculi. Either ERCP or MRCP should be done to assess the stone load in the CBD to plan the best form of surgical clearance. If these imaging methods are not available, then an intraoperative cholangiogram is mandatory for two reasons, to study the stone load and to detect any anatomical anomaly of the extrahepatic biliary passages. The authors had an access to MRCP and CT scan facility as quoted in their article. If these facilities were available, a portable X-ray facility in the operating room must have surely been available. Not having a preoperative imaging of the biliary tree amounts to failure to administer standardized care. The authors have not mentioned the criteria for biliary enteric anastomoses being done in a few cases. If primary closure was done without confirming adequate clearance of the CBD, how could retained stones if any be diagnosed. If stones are retained then the chance of giving way of the suture line is very high. This has not been documented in the study.

The duration of hospital stay as per the study is just 2 days with open CBD exploration, which is difficult to believe. Even a well-done laparoscopic CBD exploration demands a hospital stay of at least 3–4 days. In biliary tract surgery what matters is safety of the patient. If dehiscence is to occur, it usually manifests by the third or fourth postoperative day. The duration of hospital stay is no criteria to advocate a particular procedure. Sending the patients home on the second day was an extremely risky proposition. If patients were sent home after 2 days, did a hospital nurse visit the patients at home to look for the postoperative course or complications?

The standard practice of using a T tube after CBD exploration has been questioned recently [1, 2]. Various studies analyzed on the Cochrane database have shown equally good results without using a T tube [3]. Dehiscence of the suture

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line would be detected late in the absence of a drain leading to advanced biliary peritonitis by the time it is diagnosed. The mortality of this condition is very high. Hence, primary closure of the CBD has to be done judiciously. Primary closure of the CBD after exploration can be done only if certain criteria such as the following are satisfied:

1. Patent ampulla of Vater
2. Complete removal of all intraductal calculi
3. Absence of pancreatic pathology
4. Meticulous suture of the duct

The message I wish to convey is primary closure of the CBD can be done under specific circumstances strictly confirmed by radiological or endoscopic methods either

preoperatively or intraoperatively. If there is slightest doubt, the safest practice still is to close the CBD over a T tube.

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