

European ELITA ELTR multicenter survey on the management of bile duct during liver procurement, preservation and transplantation.

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Background: Surgical donor/preservation/recipient factors may play a role in the development of biliary strictures. Only scarce data are described on what is the best practice to manage the bile duct during procurement/preservation/LTx. Aim: to characterize the different techniques used among European transplant centers in terms of bile duct management in case of donation after brain death (DBD) and circulatory death (DCD). Method: an anonymous European web-survey has been sent to surgeons procuring and/or transplanting livers. Results: 44% responded (N=210/475). 53% of respondent worked as procurement and transplant surgeon in large transplant centers (>50 procurements/year). 54% of protocols are based on center guidelines. 5% of surgeons never flush bile duct before cold preservation. If flushed, the bile duct is rinsed-out through both the common bile duct (CBD) and the gallbladder by only 21% and 25% of surgeons in case of DBD and DCD, respectively. The cystic duct is ligated during the procurement of DBD/DCD donors in 33%, whatever the decision concerning cholecystectomy. 46% of surgeons prefer to do a cholecystectomy before implantation in case of DBD/DCD. An arterial back table pressure perfusion is performed by 48% and 54% of surgeons in DBD and DCD LTx, respectively. 2% and 7% of surgeons prefer to perform a hepatic artery reperfusion first in case of DBD and DCD LTx, respectively. 16% do not shorten the CBD (until bleeding) before biliary anastomosis. Protective interventions as donor pretreatment with steroids, fibrinolytics or heparin, prostacyclin analogue in cold preservation solution and recipient treatment with fibrinolytics are described. Conclusion: Obvious heterogeneity management of bile duct during procurement/preservation/LTx is observed among respondent surgeons in Europe. Internationally recognized guidelines with validated maneuvers to better preserve bile duct are urgently needed, especially with use of less-than optimal livers.