

Parenchyliver injury in orthotopic liver transplantation.

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Abstract:

Background. A 35-year period of clinical development resulted in orthotopic liver transplantation (OLT) becoming a standardized surgical procedure. Despite this progress, the rate of technical complications is still high. Although the main problem in most analyses is vascular or bile duct failure, we observed a remarkable number of parenchymal liver injuries that led to intraoperative problems. Our aim, therefore, is to present an overall report on the incidence, treatment, and clinical course of parenchymal liver injuries in OLT. **Methods.** Five hundred seventy-two consecutive OLT procedures performed between 1988 and 1998 were analyzed in a retrospective study. Parenchymal liver injury was diagnosed by means of examination of the surgical reports. Donor- and recipient-related data followed the medical report. The lesions were classified according to the Organ Injury Scale. **Results.** Parenchymal liver injury was diagnosed in 23 patients (4%). The lesions were classified as grade Ia (13.1%), grade Ib (13.1%), grade IIb (52.1%), grade IIIa (17.1%), and grade IIIb (4.3%). In 19 patients (82.6%), the lesion was detected during OLT, and in four patients (17.4%), during relaparotomy. The latter group showed significantly higher- grade injuries. Treatment was suture or fibrin glue alone, 17.4%; fibrin glue and hemostyptics, 26.1%, mesh wrapping 30.4%, and mesh packing 26.1%. Seven patients (30.4%) underwent relaparotomy. Further active bleeding was not found in any of them. Statistical analysis found a correlation between injury grade and relaparotomy rate. No patients died as a result of parenchymal liver injury. **Conclusions.** Parenchymal liver injuries can be treated well, with no adverse effect on patient or graft survival. An early decision concerning the surgical procedure for controlling hemorrhage is

required. A basically aggressive therapeutic approach might avoid further complications relating to reperfusion edema.