

不同切取方法对肝移植供肝动脉解剖变异的损伤分析

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【摘要】 目的 探讨供肝切取修整的方法及肝动脉常见变异,预防供肝切取修整过程中肝动脉损伤。**方法** 回顾性分析 2001 年 6 月至 2006 年 7 月共计 843 例供肝切取修整及肝动脉变异资料,其中 148 例供肝采用肝肾分开切取方法,695 例供肝采用腹部脏器联合切取方法。术中记录肝动脉变异类型和术中动脉误伤,重建变异肝动脉,形成单一的备吻合血管。**结果** 在 843 例供肝中,肝动脉解剖变异者 172 例,总变异率 20.4%(172/843),发生频率最高的为右肝动脉起源于肠系膜上动脉(57 例)及左肝动脉起源于胃左动脉(54 例),高变异率伴随着高损伤率。**结论** 腹部脏器联合切取方法可减少肝动脉意外损伤发生率,熟悉常见肝动脉变异类型和精细的解剖是减少肝动脉损伤的关键。

【关键词】 肝移植; 动脉变异

Relationship between variation of donor hepatic artery injury and different procurement methods JIANG Nan, ZHANG Jian, LI Hua, WANG Gen-shu, ZHANG Jun-feng, YI Shu-hong, YANG Yang, LU Min-qiang, CHEN Gui-hua. Liver Transplantation Center, Third Affiliated Hospital of Sun Yat-sen University, Guangzhou 510630, P. R. China

【Abstract】 Objective To investigate the incidence of anatomic variations of hepatic artery and methods of procurement and reconstruction to prevent the accidental injury of the hepatic artery. **Methods** The clinical data of 843 patients receiving orthotopic liver transplantation (OLT) in our hospital from June 2001 to July 2006 were retrospectively analyzed. Liver and kidney separate procurement was performed for 148 cases and abdominal organ combined procurement in 695. The variations of the hepatic artery as well as the relationship between the anomalous hepatic artery and accidental injury of the hepatic artery were analyzed. **Results** Anatomic variations of hepatic artery which were most frequently observed, were the right hepatic artery originating from the superior mesenteric artery and left hepatic artery originating from left gastric artery. The rate of the anomalous hepatic artery concomitancy increased along with elevation in the rate of accidental injury. **Conclusion** Abdominal organ combined procurement can reduce the incidence of accident injury of hepatic artery. Familiarity of the hepatic arterial variation and careful anastomosis are important to reduce injury of the hepatic artery.

【Key words】 Liver transplantation; Arterial variation

供体的切取修整方法是肝移植成功的重要组成部分。笔者对 2001 年 1 月至 2006 年 7 月完成的 843 例原位肝移植中肝动脉变异资料进行回顾性分析,旨在探讨不同供肝切取修整的方法对常见变异肝动脉损伤的影响,预防供肝切取修整过程中肝动脉的损伤。

材料与方 法

1. 供肝情况:中山大学附属第三医院肝脏移植

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中心实施的 843 例肝脏移植的供肝获取,男 821 例,女 22 例;年龄 18~35 岁。其中 695 例供肝采用腹部脏器联合切取法,148 例采用改良的快速供肝切取方法。

2. 腹部脏器联合切取法:首先插管灌注:分离出肾动脉以下的远心端腹主动脉,插入灌注管,阻断膈下腹主动脉近端,分离肠系膜上静脉,插入灌注管,立即开始灌注。在起始部阻断小肠系膜动脉。分别经腹主动脉和门静脉以 0~4℃ HCA 液 3000 ml,100~120 cm 高度快速重力灌注预降温,经下腔静脉插管作为灌注液流出道,密切观察灌注情况,将冰屑倒入肝周,经胆囊冲洗胆道。分别经腹主动脉和肠系膜上静脉各灌注 4℃ UW 液 1000~1500 ml。灌注充分后切取:腹部脏器联合切取法步骤是紧靠胃小弯侧剪开小网膜,游离胃及食道。分次剪开十