

9 Year-experience in Living Donor Liver Transplantation in Children at Ramathibodi Hospital, a Retrospective Study.

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Background

Pediatric liver transplantation has been performed increasingly in the treatment of children with end-stage liver disease. The aim of this study was to report our experience with pediatric orthotopic liver transplantation (OTL) with living related donor liver.

Methods

We performed a retrospective chart analysis of 29 living related donor liver transplantations (LRDLT) in Ramathibodi Hospital, faculty of medicine, Mahidol university for the period from March 2001 and November 2010.

Results

The most common indication was biliary atresia (BA; n = 23) and the others were; acute hepatic failure, Alagille syndrome, glycogen storage disease, neonatal hepatitis, primary sclerosing cholangitis and tyroxinemia. The overall male/female ratio was 7/22. The median age of the recipients was 1.6 Yr (range, 11 mo. - 8 Yr) and the median weight was 9.26 kg (range, 6.6 - 21.0). 17 patients (58.62 %) weighed below 10 kg. All the patients received general anesthesia, rapid sequence induction and intubation was done in 37% of the patients. Total anesthesia time was 12.27 ± 2.04 hr (median, 11.75). The estimated blood loss was $1,505 \pm 1,722$ ml (median, 900 ml). Crystalloid, colloid and blood components were given to maintain hemodynamic parameters. The average of decrease of MAP was 7% (range, 11-28%) The post reperfusion syndrome was found 13.7%. There were no major adverse events such as malignant arrhythmia, cardiac arrest. The most common complication was hypothermia. 1-year survival rate was 89.6%.

Conclusions

Pediatric liver transplantation becomes increasingly more common. Anesthetic management is important in this operation.

Keywords: *Pediatric, living donor liver transplantation, retrospective study, post reperfusion syndrome, survival rate.*