

論文審査の結果の要旨

博士の専攻分野の名称	博士（医学）	氏名	劉 畢欧
学位授与の条件	学位規則第4条第1・2項該当		
論文題目 Influence of donor liver telomere and G-tail on clinical outcome after living donor liver transplantation (ドナーテロメアやGテールの生体肝移植後の臨床所見に関する影響)			
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〔論文審査の結果の要旨〕			
<p>It has been reported that the age of donors affects the outcome of patients after liver transplantation and the length of telomere is associated with age. However, to our knowledge, the impact of donor age and donor liver telomere length in liver transplantation has not been enough analyzed. The purpose of this study was to clarify the influence of the lengths of telomere and telomeric 3'-overhang (G-tail) of donor liver tissues on the outcomes of donors and recipients after living donor liver transplantation. The lengths of telomere and G-tail derived from blood and liver tissue samples of 55 living donors were measured using hybridization protection assay. The mean length of telomere of blood samples was inversely correlated with donor age, but the lengths of telomere and G-tail of liver tissues did not correlate with donor age. Age, telomere, and G-tail length from blood did not affect postoperative liver failure and early liver regeneration of donors.</p> <p>On the other hand, the longer the liver telomere, the poorer the liver regeneration tended to be, particularly with significant difference in donor who underwent right hemi-hepatectomy. The authors found that the survival rate of recipients who received liver graft with longer telomeres was inferior to that of those who received liver graft with shorter ones. Elderly donor, longer telomere of donor liver, and higher Model for End-Stage Liver Disease score were identified as independent risk factors for recipient survival after transplantation.</p> <p>In conclusion, telomere shortening in healthy liver does not correlate with age, whereas longer liver telomere of liver tissues negatively influences donor liver regeneration and recipient survival after living donor liver transplantation. These results can direct future studies and investigations on telomere shortening in the</p>			

clinical and experimental transplant setting.

Therefore, all the members of Screening Committee unanimously approved the dissertation is eligible for the Doctor of Philosophy in Medical Science to Liu Biou.