QUALITY OF LIFE IN PRE-ADOLESCENT CHILDREN AFTER PEDIATRIC LIVER TRANSPLANT FOR BILIARY ATRESIA IS SIMILAR IN EUROPE AND CANADA

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Background: Biliary atresia (BA) is the commonest indication for pediatric LT performed in infants, with excellent long-term patient and graft survival world-wide. Optimizing durable outcomes for this patient population can be enhanced by understanding health-related quality of life (HRQoL) concerns.

Aims: This pilot study aimed to evaluate and compare HRQoL of middle-school aged BA subjects who underwent LT in Europe and Canada, and to explore the relationship between HRQoL with demographic and medical variables.

Methods: Following available guidelines, the English-version of a pediatric liver transplant-specific HRQoL questionnaire (PeLTQL) available for children 8 to 18 years, was translated and cross-culturally adapted into five different languages. Inclusion criteria included BA subjects with current age between 8 to 12 years who underwent LT before the age of two years followed in one of 8 different pediatric LT centers in Canada or in a ChiSFree/EPLTN network program. Patients completed validated disease-specific (PeLTQL) and generic (PedsQL™) HRQoL tools. Their parents completed the corresponding, validated parent-proxy tools. Total PeLTQL and PedsQL™ scores range between 0 and 100, with higher scores indicating better HRQoL. Patient demographics and medical variables were also reviewed.

Results: A total of 64 [female 54%, white 83.4%, median age 9.77 (range 8.05-12) years] BA subjects 6 or more years after LT were evaluated. Polish, Spanish, Italian, English, German and French questionnaires were completed by 19, 18, 10, 10, 5 and 2 BA subjects respectively. High correlation was seen between patient-reported and parent-reported PeLTQL scores (r=.71, p <0.0001) and between PeLTQL and PedsQL™ scores (r=.61, p<0.0001). Total PedsQL and PeLTQL scores were not statistically different between different language-speaking populations. Higher total PeLTQL scores were seen in subjects on immunosuppression monotherapy (60.9%, 100% on Tacrolimus) compared to patients on dual or multiple therapy (n = 39 vs 23; PeLTQL Total Score 78.4±12.9 vs 68.5 ±18.5, p = 0.03).

Conclusions: Total PedsQL and PeLTQL scores were not different in pediatric LT recipients with BA across six different language-speaking populations in this pilot study, suggesting similarity of broader determinants of health issues. Ongoing work is targeting better understanding of the impact of immunosuppression requirements on HRQoL.
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