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EDITORIAL

Common challenge topics in pediatric transplantation

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This special issue is dedicated to the common challenge topics in pediatric transplantation. It contains 11 chapters, ranging from clinical research in pediatric transplantation to translational research (from bench to bedside). It includes comprehensive reviews from renowned scientists, clinicians and surgeons from five countries from the International Pediatric Transplantation Association (IPTA), Harvard University, the University of Miami and the University of São Paulo Medical School. The clinical management of specific issues, such as sensitized patients and ABO blood type-incompatible transplantation, is addressed. In addition, the challenges facing this patient population and the future perspectives for clinical research are discussed.

KEYWORDS: Transplantation; Children; Research; Growth; Survival.

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Pediatric transplantation is recognized as the treatment of choice for children with end-stage organ disease. Although the procedure results in improved patient survival, there are common challenge topics that are important to discuss, need to be developed and provide the opportunity for future research.

In this special issue of Clinics, leading internationally recognized scientists, clinicians and surgeons from various sub-specialties were invited to contribute high-quality and comprehensive reviews of the most current advances in pediatric transplantation. The topic selection demonstrates the exciting and challenging issues and provides an opportunity to explore the research perspectives in this area.

The special issue commences with insights into the growth of pediatric organ transplantation. Fine (1), from Stony Brook New York, presents the current status on the growth of pediatric organ transplantation and the role that steroids play in the growth of this population. Shapiro and Nguyen (2) review the new immunosuppression drugs that could minimize the side effects of the current regimens. In a clinical setting, Conway and Dipchand (3) explore the current knowledge of the challenge of treating sensitized pediatric heart transplanted patients, and Aikawa et al. (4) reveal an outstanding long-term follow-up of ABO blood type-incompatible kidney transplantation. Marks and Kim (5), from the United Kingdom, continue the theme by highlighting the long-term survival of pediatric transplantation patients.

Torricelli et al. (6), from the University of São Paulo, review the current immediate postoperative care management of kidney transplantation patients. In addition, Tannuri and Tannuri (7) describe and discuss specific aspects of liver transplantation methods that can avoid potential complications. Postoperative care in heart transplantation (in the immediate and late follow-up periods) is also addressed, and the authors outline the current clinical recommendations (8). Ten years of experience with lung transplantation in our institution is summarized, and challenging management issues are noted (9).

Lipshultz et al. (10) explore the research from bench to bedside. The closing article addresses several ethical and safety concerns in clinical pediatric transplantation research (11).

This special issue of Clinics aims to be a landmark in pediatric transplantation and addresses the principal topics discussed in the International Pediatric Transplant Association (IPTA) Symposium: Common Challenge Topics in Pediatric Transplantation, which was held at the University of São Paulo Medical School as part of the school's Calendar of Centenary Celebration. Scientists, clinicians and surgeons worldwide have kindly and generously contributed to current knowledge of the challenge topics that professionals in this field face in their daily routines. We hope that the scientific community, students and all associated professionals appreciate this special issue of Clinics, which can provide an exciting motivational opportunity for advancement in this field.

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REFERENCES

1. Fine RN. Growth following solid organ transplantation in childhood. Clinics. 2014;69(S1):3-7, http://dx.doi.org/10.6061/clinics/2014(Sup01)02.

2. Shapiro R, Nguyen C. New Immunosuppressive agents in pediatric transplantation. Clinics. 2014;69(S1):8-16, http://dx.doi.org/10.6061/clinics/2014(Sup01)03.
3. Conway J, Dipchand A. Challenges with sensitized recipients in pediatric heart transplantation. Clinics. 2014;69(S1):17-21, http://dx.doi.org/10.6061/clinics/2014(Sup01)04.
4. Aikawa A, Kawamura T, Shishido S, Saito K, Takahashi K, and the ABO incompatible transplantation committee members. ABO incompatible living-donor pediatric kidney transplantation in Japan. Clinics. 2014;69(S1):22-27, http://dx.doi.org/10.6061/clinics/2014(Sup01)05.
5. Marks S, Kim JJ. Long-term outcomes of children after solid organ transplantation. Clinics. 2014;69(S1):28-38, http://dx.doi.org/10.6061/clinics/2014(Sup01)06.
6. Torricelli FC, Watanabe A, David-Neto E, Nahas WC. Current management issues of immediate postoperative care in pediatric kidney transplantation. Clinics. 2014;69(S1):39-41, http://dx.doi.org/10.6061/clinics/2014(Sup01)07.
7. Tannuri U, Tannuri AC. Postoperative care in pediatric liver transplantation. Clinics. 2014;69(S1):42-46, http://dx.doi.org/10.6061/clinics/2014(Sup01)08.
8. Azeka E, Jatene M, Tanaka AC, Galas FR, Hajjar LA, Miura N, et al. Clinical recommendations for postoperative care after heart transplantation in children: 21 years of single center experience. Clinics. 2014;69(S1):47-50, http://dx.doi.org/10.6061/clinics/2014(Sup01)09.
9. Camargo PC, Pato EZ, Campos SV, Afonso Jr. JE, Carraro RM, Costa AN, et al. Pediatric lung transplantation: 10 years experience. Clinics. 2014;69(S1):51-54, http://dx.doi.org/10.6061/clinics/2014(Sup01)10.
10. Lipshultz SE, Chandar JJ, Rusconi PG, Fornoni A, Abitbol L, Burke GW, et al. Issues in solid-organ transplantation in children: translational research from bench to bedside. Clinics. 2014;69(S1):55-72, http://dx.doi.org/10.6061/clinics/2014(Sup01)11.
11. Azeka E, Saavedra LC, Fregni F. Clinical research in pediatric organ transplantation. Clinics. 2014;69(S1):73-75, http://dx.doi.org/10.6061/clinics/2014(Sup01)12.