

**AN OFFICIAL PUBLICATION OF:**

- The Transplantation Society  
The Hellenic Transplantation Society  
The Scandinavian Transplantation Society  
The Transplantation Society of Latin America and the Caribbean  
The Society for Organ Sharing  
The Catalan Transplantation Society  
The Asian Transplantation Society  
The Middle East Society for Organ Transplantation  
The French Speaking Society of Transplantation  
Israel Transplantation Society  
International Pancreas and Islet Transplant Association  
Polish Transplantation Society  
The Turkish Transplantation Society  
The Portuguese Transplantation Society  
The Brazilian Transplantation Society  
The Andalusian Transplantation Society  
The Chilean Transplantation Society  
The Italian Transplantation Society  
The German Transplantation Society  
The Luso-Brazilian Transplantation Society  
International Society of Organ Donation and Procurement  
Liver Anesthesia and Intensive Care Society

# TRANSPLANTATION PROCEEDINGS

VOL. 49  
NO. 4  
MAY 2007

## CONTENTS

### 10TH CONGRESS OF THE MIDDLE EAST SOCIETY FOR ORGAN TRANSPLANTATION

#### PREFACE

- 785** Organ Transplantation in the Middle East  
*M. Al-Mousawi*
- 786** IX<sup>th</sup> MESOT Congress: Quality of the Abstracts  
*M.-H. Nourbala, B. Einollahi, H.-R. Khoddami-Vishte, S. Assari, and N. Simforoosh*
- 788** Transplantation Research in Iran: A Bibliometric Study  
*J. Aslani, H. Khedmat, S. Assari, H.-R. Khoddami-Vishte, F. Alaeddini, B. Einollahi, and N. Simforoosh*

#### ORGAN DONATION

##### Deceased Donors

- 793** Improving the Organ Transplantation Program in Greece: Institution of Local Transplant Coordinators' Network  
*T. Karatzas, G. Menoudakou, E. Chatzixiros, B. Kyrokou, S. Maleskou, and A. Kostakis*
- 797** Substantial Increase in Cadaveric Organ Transplantation in Greece for the Period 2001-2005  
*T. Karatzas, M. Katsani, E. Mitropoulou, E. Nikolaou, A. Vosnides, and A. Kostakis*
- 801** Foundation of Local Network for Increasing Organ Donation in Southern Iran  
*A. Bahador, M. Yazdani, S. Gholami, H. Salahi, S. Nikeghbalian, H.R. Davari, S.M. Nejatollahi, K. Kazemi, H. Jalaeian, and S.A. Malek-Hosseini*

##### Living Donors

- Kidney Donors
- 803** Donor Gender Balance in a Living-Related Kidney Transplantation Program in Oman  
*N. Mohsin, M. Budruddin, M. Khalil, A. Pakkyarra, A. Jha, E. Mohammed, P. Kamble, H. Ahmed, E. Militsala, N.A. Prabhakar, H. Al-Marhuby, J. Ahmed, and A. Daar*
- 807** Laparoscopic Donor Nephrectomy: Single-Center Experience in Egypt With 400 Consecutive Cases  
*H.A. Fettouh, H.A. Raouf, A. Shenoufy, A. El Feel, H. Agabo, A.A. Hakim, and I.A. Fettouh*

## CONTENTS CONTINUED

- 811** Laparoscopic Donor Nephrectomy for Pediatric Recipient  
*H.A. Fettouh, H.A. Raouf, A. el Shenoufy, A. El Feel, H. Agabo, A.A. Hakim, and I.A. Fettouh*
- 813** Kuwait Experience in Laparoscopic Donor Nephrectomy: First 80 Cases  
*S. Buresley, M. Samhan, and M. Al-Mousawi*
- 816** Color Doppler Findings in Transplanted Kidneys and Remnant Kidneys of Donors 6 to 12 Months After Kidney Transplantation  
*H.T. Khosroshahi, M.K. Tarzamni, M. Gojazadeh, and A. Bahluli*
- 819** Attitude of Iranian Nephrologists Toward Living Unrelated Kidney Donation  
*S. Ossareh, M.B. Asl, S. Al-Zubairi, and S. Naseem*
- 822** Is Living Kidney Donation Really Safe?  
*S.A. Azar, M.R. Nakhjavani, M.K. Tarzamni, A. Faragi, A. Bahloli, and N. Badroghli*
- 824** Socioeconomic Status of Iranian Living Unrelated Kidney Donors: A Multicenter Study  
*T. Malakoutian, M.S. Hakemi, A.A. Nassiri, M. Rambod, A.N. Haghghi, B. Broumand, and I. Fazel*

### Liver Donors

- 826** Right Hepatic Lobe Donation: Impact on Donor Quality of Life  
*S. Sevmis, T. Diken, F. Boyvat, A. Torgay, and M. Haberal*
- 829** Donor Outcome After Living Liver Donation: A Single-Center Experience  
*H. Khalaf, M. Al-Sofayan, Y. El-Sheikh, H. Al-Bahili, M. Al-Sagheir, and M. Al-Sebayel*

## ISCHEMIA-REPERFUSION INJURY

### Clinical

- 837** Effect of the Interval Between Organ Donor Brain Death and Organ Harvesting on Kidney Graft Function After Transplantation  
*M. Guner, A. Pirat, P. Zeyneloglu, P. Karaaslan, S. Sevmis, T. Colak, and G. Arslan*
- 842** Pretransplantation Systolic Blood Pressure and the Risk of Delayed Graft Function in Young Living-Related Renal Allograft Recipients  
*F.N. Ozdemir, A. Ibis, A. Altunoglu, A. Usluogullari, Z. Arat, and M. Haberal*
- 846** The Incidence and Risk Factors of Delayed Graft Function in 689 Consecutive Living Unrelated Donor Renal Transplantation  
*A.J. Ghods, S. Savaj, M. Abbasi, H. Heidari, and H. Rokhsatyazdi*
- 848** Influence of Perioperative Acid-Base Balance Disorders on Early Graft Function in Kidney Transplantation  
*K. Tejchman, L. Domanski, J. Sienko, T. Sulikowski, M. Kaminski, M. Romanowski, K. Pabiszak, M. Ostrowski, and K. Ciechanowski*
- 852** Association of Hyperglycemia on Allograft Function in the Early Period After Renal Transplantation  
*M.R. Ganji, M. Charkhchian, M. Hakemi, G.H. Nederi, T. Solymanian, F. Saddadi, M. Amini, and I. Najafi*

## CONTENTS CONTINUED

### Experimental

- 855** Ischemia/Reperfusion of the Liver Induces Heart Injury in Rats  
*C.F. Chen, D. Wang, H.I. Lin, F.J. Leu, C.Y. Shen, and C.-C. Chou*
- 858** Reperfusion Liver Injury–Induced Superoxide Dismutase and Catalase Expressions and the Protective Effects of N-Acetyl Cysteine  
*C.F. Chen, C.W. Hsueh, T.S. Tang, D. Wang, C.Y. Shen, and J.S. Pei*
- 861** Translocation of Pancreatic Juice After Ischemia and Reperfusion of the Intestines and the Effects of Gabexate Mesilate (FOY) in Rats  
*C.F. Chen, D. Wang, H.I. Lin, C.Y. Shen, and N.P. Yang*
- 864** Antioxidant Vitamins Preserve Superoxide Dismutase Activities in Gentamicin-Induced Nephrotoxicity  
*M. Kadkhodaee, H. Khasdar, H.A. Arab, R. Ghaznavi, M. Zahmatkesh, and M. Mahdavi-Mazdeh*
- 866** Cyclosporine Effects on the Antioxidant Capacity of Rat Renal Tissues  
*R. Ghaznavi, M. Zahmatkesh, M. Kadkhodaee, and M. Mahdavi-Mazdeh*

### RENAL TRANSPLANTATION

#### Candidates

- 871** Kidney Transplantation Candidates and Cardiovascular Risk Factors  
*H. Noshad, M.R. Ardalani, M. Mortazavi, H. Tayebi, J. Safa, and N. Nezami*
- 875** Kidney Disease in Bahrain: A Biopsy-Based Epidemiological Study  
*A.A. Arrayed, S. Shariff, and M.M.A. Maamari*
- 879** Factors Associated With Peak Oxygen Uptake in Hemodialysis Patients Awaiting Renal Transplantation  
*S. Sezer, R. Elsurer, G. Ulubay, F.N. Ozdemir, and M. Haberal*
- 883** Value of the Tuberculin Skin Test in Screening for Tuberculosis in Dialysis Patients  
*M.A. Habesoglu, D. Torun, Y.Z. Demiroglu, M. Karatasli, N. Sen, H. Ermis, Nurhan Ozdemir, and F.O. Eyuboglu*
- 887** Are Large Nonfunctional Kidneys Risk Factors for Posttransplantation Urinary Tract Infection in Patients With End-Stage Renal Disease Due To Autosomal Dominant Polycystic Kidney Disease?  
*M. Salehipour, H. Jalaeian, H. Salahi, A. Bahador, H.R. Davari, S. Nikeghbalian, M.M. Sagheb, G.A. Raiss-Jalali, J. Roozbeh, S. Behzadi, P. Janghorban, H.N. Sepas, and S.A. Malek-Hosseini*
- 889** Pleural Effusion in Long-Term Hemodialysis Patients  
*T. Bakirci, G. Sasak, S. Ozturk, S. Akcay, S. Sezer, and M. Haberal*
- 892** Study of the Effect of Renal Transplantation on Methacholine Challenge Test in Patients With End-Stage Renal Failure in Shahid Doctor Labafinejad Hospital in Tehran, Iran  
*S. Izadi, H. Sohrabpor, and S. Izadi*
- 895** Kidney Transplantation: Is There Any Place for Refugees?  
*B. Einollahi, M.H. Noorbala, B. Kardavani, M. Moghani-Lankarani, S. Assari, N. Simforosh, and N. Bagheri*

## CONTENTS CONTINUED

### Outcomes

- 898** Results of Kidney Transplantation Between Spouses: A Single-Center Experience  
*F. Karakayali, G. Moray, T. Colak, F. Boyvat, and M. Haberal*
- 901** Which Primary Diagnosis Has the Highest in-Hospital Mortality Rate for Kidney Recipients?  
*H. Khedmat, H. Araghizadeh, S. Assari, M. Moghani-Lankarani, and M. Aghanassir*
- 904** Cadaveric Kidney Transplantation: Five Years Experience at a Single Center  
*M. Yazdani, M.H. Izadpanahi, M.R. Gharaati, and F. Tadayon*
- 907** Iranian Model of Renal Allograft Transplantation In 3028 Recipients: Survival and Risk Factors  
*B. Einollahi, V. Pourfarziani, M. Ahmadzad-Asl, F. Davoudi, M. Lessan-Pezeshki, A. Davoudi, A. Nourbala, S. Shariat-Moghani, E. Nemati, F.F. Poor-Reza-Gholi, and N. Simforoosh*
- 911** Renal Transplantation in Children  
*M. Samhan, T. Fathi, N. Al-Kandari, S. Buresley, M.R.N. Nampoory, P. Nair, M. Halim, and M. Al-Mousawi*
- 914** Does Donor Nephron Mass Have Any Impact on Graft Survival?  
*M. Taherimahmoudi, A. Mehrsai, M. Nikoobakht, A. Saraji, A. Emamzadeh, and G. Pourmand*
- 917** A Logistic Regression Model for Predicting Health-Related Quality of Life in Kidney Transplant Recipients  
*H. Khedmat, G.-R. Karami, V. Pourfarziani, S. Assari, M. Rezailashkajani, and M.M. Naghizadeh*
- 923** Renal Transplantation in Iran Over the Past Two Decades: A Trend Analysis  
*M.-H. Noorbala, H. Rafati-Shaldehi, M. Azizabadi-Farahani, and S. Assari*
- 927** The Cost of Kidney Transplantation in Iran  
*M.-H. Nourbala, B. Einollahi, B. Kardavani, H.-R. Khoddami-Vishte, S. Assari, M. Mahdavi-Mazdeh, and N. Simforoosh*
- 930** Data-Entropy Analysis of Renal Transplantation Data  
*M.-T. Hollisaaz, H. Khedmat, M. Effatmanesh-Nik, M. Yousefvand, S. Mansouri, S.-H. Saadat, H. Rafati-Shaldehi, and M. Ebrahiminia*
- 932** Time-Dependent Variations in Urine Output After Renal Transplantation  
*H.T. Khosroshahi, R. Oskui, M.M. Shoja, R.S. Tubbs, and M.R. Ardalan*

### Surveillance Methods

- 934** Serum C-Reactive Protein Surge in Renal Transplant Recipients: Link With Allograft Survival  
*N.F. Ozdemir, R. Elsurer, A. Ibis, Z. Arat, and M. Haberal*
- 938** Early Onset Proteinuria After Renal Transplantation: A Marker for Allograft Dysfunction  
*A. Ibis, A. Altunoglu, A. Akgül, C.A. Usluogullari, Z. Arat, F.N. Ozdemir, and M. Haberal*

## CONTENTS CONTINUED

- 941** Effect of Hypertension on Transplant Kidney Function: Three Year of Follow-up  
*G.A. Raiss Jalali, A. Fazelzadeh, and A.R. Mehdizadeh*
- 943** Histopathologic Evaluation of Pretransplant Biopsy as a Factor Influencing Graft Function After Kidney Transplantation: A 1-Year Observation  
*T. Sulikowski, K. Tejchman, L. Domański, E. Urasińska, M. Kamiński, Z. Ziętek, J. Sieńko, M. Romanowski, K. Safranow, R. Bohatyrewicz, K. Ciechanowski, and M. Ostrowski*
- 948** Microchimerism and Renal Transplantation: Doubt Still Persists  
*A. Saraji, G. Pourmand, A. Mehrsai, M. Taherimahmodi, M. Nikoobakht, A. Asadpour, B. Nikbin, N. Tajik, and A. Emamzadeh*
- 951** Calcitriol Started in the Donor, Expands the Population of CD4<sup>+</sup>CD25<sup>+</sup> T Cells in Renal Transplant Recipients  
*M.R. Ardalan, H. Maljaei, M.M. Shoja, A.R. Piri, H.T. Khosroshahi, H. Noshad, and H. Argani*
- 954** Genetic Association of Interleukin-4, Interleukin-10, and Transforming Growth Factor- $\beta$  Gene Polymorphism With Allograft Function in Renal Transplant Patients  
*M. Amirzargar, M. Yavangi, A. Basiri, S.H. Moghadam, F. Khosravi, G. Solgi, M. Gholiaf, F. Khoshkho, F. Dadaras, M. Mahmmodi, B. Ansaripour, A. Amirzargar, and B. Nikbin*
- 958** Serum T-Lymphocyte Cytokines Cannot Predict Early Acute Rejection in Renal Transplantation  
*A. Ghafari, K. Makhdoomi, P. Ahmadpour, A.T. Afshari, S.S. Lak, and L. Fakhri*

### Rehospitalizations

- 962** Primary Kidney Disease and Post-Renal Transplantation Hospitalization Costs  
*K. Ghoddousi, M.K. Ramezani, S. Assari, M.M. Lankarani, M. Amini, H. Khedmat, and M.T. Hollisaaz*
- 966** Diabetes as the Cause of End-Stage Renal Disease Affects the Pattern of Post Kidney Transplant Rehospitalizations  
*M. Ramezani, K. Ghoddousi, M. Hashemi, H.-R. Khoddami-Vishte, S. Fatemi-Zadeh, S.H. Saadat, H. Khedmat, and M. Naderi*
- 970** Causes of Rehospitalization After Renal Transplantation; Does Age of Recipient Matter?  
*E. Nemati, A.-R. Saadat, M. Hashemi, H.-R. Khoddami-Vishteh, and M. Moghani-Lankarani*
- 974** Prediction of Inpatient Survival and Graft Loss in Rehospitalized Kidney Recipients  
*E. Nemati, V. Pourfarziani, A.M. Jafari, S. Assari, M. Moghani-Lankarani, H. Khedmat, N. Bagheri, and S.H. Saadat*
- 978** Prolonged Rehospitalizations Following Renal Transplantation: Causes, Risk Factors, and Outcomes  
*M. Naderi, J. Aslani, M. Hashemi, S. Assari, M. Amini, and V. Pourfarziani*
- 981** Hospitalization Databases: A Tool for Transplantation Monitoring  
*V. Pourfarziani, H. Rafati-Shaldehi, S. Assari, M.-M. Naghizadeh, M. Amini, M.T. Hollisaaz, S.H. Saadat, B. Einollahi, and M. Naderi*

## CONTENTS CONTINUED

### Complications

#### Infection

- 984** Clinical Course of Hepatitis C Virus Infection in Renal Transplant Recipients  
*N. Savas, S. Ocal, T. Colak, H. Karakayali, U. Yilmaz, and M. Haberal*
- 987** Cytomegalovirus Disease After Kidney Transplantation: Clues to Accurate Diagnosis  
*E. Nemat, M. Eizadi, M. Moghani Lankarani, B. Kardavani, H.-R. Khoddami-Vishteh, E. Kalantar, M. Lesan-Pezeshki, H. Khedmat, and A.R. Saadat*
- 990** The Association Between Cytomegalovirus Infection and Atherosclerotic Events in Renal Transplant Recipients  
*F.N. Ozdemir, A. Akgul, A. Altunoglu, A. Bilgic, Z. Arat, and M. Haberal*
- 993** Clinical Manifestation, Laboratory Findings, and the Response of Treatment in Kidney Transplant Recipients With CMV Infection  
*E. Razeghi, A. Hadadi, M. Mansor-Kiaei, M. Molavi, P. Khashayar, and G. Pourmand*
- 997** Oral Valgancyclovir Versus Intravenous Gancyclovir for Cytomegalovirus Prophylaxis in Kidney Transplant Recipients  
*T. Said, M.R.N. Nampoory, A.S. Pacsa, S. Essa, N. Madi, N. Fahim, M. Abraham, P. Nair, T. Al-Otaibi, M.A. Halim, K.V. Johny, and M. Al-Mousawi*
- 1000** Seroprevalence of Human Herpes Virus-8 in Renal Transplant Recipients: A Single Center Study From Iran  
*P. Ahmadpoor, B. Ilkhanizadeh, P. Sharifzadeh, K. Makhdoomi, A. Ghafari, A. Nahali, Z. Yekta, and F. Noroozinia*
- 1003** Gastro-Duodenal Lesions and *Helicobacter pylori* Infection in Uremic Patients and Renal Transplant Recipients  
*H. Khedmat, M. Ahmadzad-Asl, M. Amini, M. Lessan-Pezeshki, B. Einollahi, V. Pourfarziani, M.H. Naseri, and F. Davoudi*
- 1008** Tuberculosis in Iranian Kidney Transplant Recipients: A Single-Center Experience  
*A. Ghafari, K. Makhdoomi, P. Ahmadpoor, A.T. Afshari, M.M. Fallah, and K. Rezaee*
- 1012** Tuberculosis After Renal Transplantation  
*H. Kaaroud, S. Beji, K. Boubaker, E. Abderrahim, F. Ben Hamida, T. Ben Abdallah, F. El Younsi, F. Ben Moussa, and A. Kheder*
- 1014** Hyperinfection Strongyloidiasis: An Anticipated Outbreak in Kidney Transplant Recipients in Kuwait  
*T. Said, M.R.N. Nampoory, M.P. Nair, M.A. Halim, S.A. Shetty, A.V. Kumar, E. Mokadas, A. Elsayed, K.V. Johny, M. Samhan, and M. Al-Mousawi*
- 1016** Urinary Tract Infections in Renal Transplant Recipients  
*S.S. Senger, H. Arslan, Ö.K. Azap, F. Timurkaynak, Ü. Çağır, and M. Haberal*

## CONTENTS CONTINUED

### Metabolic

- 1018** Renin–Angiotensin System Polymorphisms and Hemoglobin Level in Renal Allografts: A Comparative Study Between Losartan and Enalapril  
*M. Noroozianaval, H. Argani, M. Aghaeishahsavari, P. Veisi, A. Ghorbanikhaghjo, N. Rashtchizadeh, M. Jabbarpourbonyadi, and H. Hamzeiy*
- 1023** Is Uric Acid a Predictive Factor for Graft Dysfunction in Renal Transplant Recipients?  
*A. Akgul, A. Bilgic, A. Ibis, F.N. Ozdemir, Z. Arat, and M. Haberal*
- 1027** Effects of Renal Transplantation on Serum-Free and Total PSA Levels  
*K. Kamali and M.A. Zargar*
- 1029** Does Renal Transplantation Improve Erectile Dysfunction in Hemodialysed Patients? What is the Role of Associated Factors?  
*G. Pourmand, A. Emamzadeh, S. Moosavi, A. Mehrsai, M. Taherimahmoudi, M. Nikoobakht, A. Saraji, and S. Salem*
- 1033** Calcium and Phosphorus Metabolism Disturbances After Renal Transplantation  
*M. Ramezani, B. Einollahi, M.A. Asl, M. Nafar, V. Pourfarziani, M. Moradi, A. Samadpour, M. Alghasi, and F. Davoudi*
- 1036** Avascular Osteonecrosis After Renal Transplantation  
*H. Hedri, M. Cherif, K. Zouaghi, E. Abderrahim, R. Goucha, F. Ben Hamida, T. Ben Abdallah, F. Elyounsi, F. Ben Moussa, H. Ben Maiz, and A. Kheder*
- 1039** Bone Mineral Density Changes Within 11 Months of Renal Transplantation in Iranian Patients  
*N. Bayat, B. Einollahi, V. Pourfarzian, G. Alishiri, E. Nemati, N. Bagheri, S.M. Miri, and P.K. Elizeii*
- 1044** Hyperlipidemia After Renal Transplantation and Its Relation to Graft and Patient Survival  
*M. Ramezani, B. Einollahi, M. Ahmadzad-Asl, M. Nafar, V. Pourfarziani, A. Samadpour, M. Moradi, M. Alghasi, H. Chalian, and F. Davoudi*
- 1048** Medical Comorbidities After Renal Transplantation  
*M.-T. Hollisaz, M. Aghanassir, M. Lorgard-Dezfuli-Nezad, S. Assari, R. Hafezie, and M. Ebrahiminia*
- 1051** Serum Erythropoietin Levels and Their Correlation With the Erythropoietic System in Hemodialysis Patients and Renal Allograft Recipients  
*H.T. Khosroshahi, M.M. Shoja, R.S. Tubbs, R. Estakhri, and M.R. Ardalan*
- 1054** The Outcome of Diverticulosis in Kidney Recipients With Polycystic Kidney Disease  
*V. Pourfarziani, S.-M. Mousavi-Nayeeni, H. Ghaheri, S. Assari, S.H. Saadat, F. Panahi, M.-H. Noorbala, A. Vasei, A.-R. Norouzi, and N. Simforoosh*

### Malignancy

- 1057** Evaluation of Posttransplantation Malignancies Compared With De Novo Tumors  
*A.N. Haberal, D. Süren, B. Demirhan, B. Bilezikçi, B. Celasun, and M. Haberal*

## CONTENTS CONTINUED

- 1063** Recurrent Multiple Myeloma Following Renal Transplantation: A Case Report  
*D. Taheri, A. Chehrei, M. Fesharakizadeh, S. Seyrafean, S. Shahidi, A Emami, S. Taheri, and M. Azani*
- 1066** Abdominal Computed Tomography Findings of Malignant Tumors in Patients With Solid Organ Transplants  
*E.M.K. Ulu, N.U. Tutar, M. Coskun, H.G. Tore, Z. Guvenc, and M. Haberal*
- 1071** Posttransplantation Lymphoproliferative Disorders in Renal Transplant Recipients: Report of Over 20 Years of Experience  
*A. Saadat, B. Einollahi, M.A. Ahmadzad-Asl, M. Moradi, M. Nafar, V. Pourfarziani, A. Firoozan, F. Porrezagholi, and F. Davoudi*
- Psychologic
- 1074** Anxiety and Depression Are Correlated With Higher Morbidity After Kidney Transplantation  
*S. Noohi, M. Khaghani-Zadeh, M. Javadipour, S. Assari, M. Najafi, M. Ebrahiminia, and V. Pourfarziani*
- 1079** Are All Domains of Quality of Life Poor Among Elderly Kidney Recipients?  
*S. Noohi, G.R. Karami, M. Lorgard-Dezfulti-Nejad, M. Najafi, and S.H. Saadat*
- 1082** Anxiety and Depression: A Comparison Between Renal Transplant Recipients and Hemodialysis Patients  
*R. Karaminia, S.A. Tavallaii, M. Lorgard-Dezfulti-Nejad, M. Moghani Lankarani, H. Hadavand Mirzaie, B. Einollahi, and A. Firoozan*
- 1085** Marital Quality in Kidney Transplant Recipients: Easy to Predict, Hard to Neglect  
*A. Fathi-Ashtiani, G.R. Karami, B. Einollahi, S. Assari, F. Aghanasiri, M. Najafi, and E. Nemati*
- 1088** Outcome of Living Kidney Transplant: Pediatric in Comparison to Adults  
*M. Torkaman, Z. Khalili-Matin-Zadeh, M. Azizabadi-Farahani, M. Moghani-Lankarani, S. Assari, V. Pourfarziani, S.H. Saadat, Z. Kavehmanesh, and S. Afshar-Payman*
- 1091** Does Etiology of End-Stage Renal Disease Affect Sleep Quality in Kidney Transplant Recipients?  
*J. Ameli, H. Kachuee, S. Assari, V.R. Rasta, H.R. Khoddami-Vishte, B. Einollahi, M. Lessan-Pezeshki, and H. Khedmat*
- 1095** Sleep Quality and Its Correlates in Renal Transplant Patients  
*H. Kachuee, J. Ameli, S. Taheri, S. Assari, F. Riahipour, H. Khedmat, and A.R. Saadat*
- Technical Aspects
- 1098** Vascular Complication and Doppler Ultrasonographic Finding After Renal Transplantation  
*M.K. Tarzamni, H. Argani, M. Nurifar, and N. Nezami*
- 1103** Duplex Sonographic Measurements in Allografted Kidneys: A Cross-Sectional Study  
*N. Nouri-Majelan and R. Nafici*

## CONTENTS CONTINUED

- 1108** Pelvic Nerve Neuropathy After Kidney Transplantation  
*M. Nikoobakht, A. Mahboobi, A. Saraji, A. Mehrsai, A. Emamzadeh, M.T. Mahmoudi, and G. Pourmand*
- 1111** Multidetector Computed Tomography Angiography in Detection of Active Bleeding in Renal and Liver Transplant Recipients  
*I. Kirbas, N.U. Tutar, F.K. Emiroglu, M. Coskun, and M. Haberal*
- 1116** Outcome of Renal Allografts With Multiple Arteries  
*A.E. Gawish, F. Donia, M. Samhan, M.A. Halim, and M. Al-Mousawi*
- 1118** Dual Kidney Transplantation Using Midline Extraperitoneal Approach: Description of a Technique  
*H.H. Haider, H.G. Illanes, G. Ciancio, J. Miller, and G.W. Burke*
- 1120** Renal Allograft Venous Thrombosis Is Salvageable  
*T. Fathi, M. Samhan, A. Gawish, F. Donia, and M. Al-Mousawi*
- Other Complications
- 1122** Severity of Chronic Pain Affects Health Care Utilization After Kidney Transplantation  
*M.-T. Hollisaaz, M.-H. Noorbala, N. Irani, S. Bahaeloo-Horeh, S. Assari, S.-H. Saadat, H. Araghizadeh, and Y. Rezaie*
- 1126** Pain Affects Health-Related Quality of Life in Kidney Transplant Recipients  
*M.-H. Nourbala, M.-T. Hollisaaz, M. Nasiri, S. Bahaeloo-Horeh, M. Najafi, H. Araghizadeh, Y. Rezaie, and M. Lak*
- 1130** Pustular Psoriasis After Renal Transplantation  
*H. Kaaroud, S. Béji, A. Jebali, F. Ben Hamida, F. Ben Moussa, T. Ben Abdallah, E. Abderrahim, R. Bardi, K. Ayed, and A. Kheder*
- 1132** Evaluation of Effect of Renal Transplantation in Treatment of Restless Legs Syndrome  
*S.A. Azar, R. Hatefi, and M. Talebi*
- 1134** An Ophthalmological Complication: Central Serous Chorioretinopathy in a Renal Transplant Recipient  
*F. Oliaei, A. Rasoulinejad, and B. Seifi*
- 1136** Impact of Pregnancy on the Outcome of Kidney Transplantation  
*N.K. Kashanizadeh, E. Nemat, M. Sharifi-Bonab, M. Moghani-Lankarani, S. Ghazizadeh, B. Einollahi, M. Lessan-Pezeshki, and H. Khedmat*
- 1139** Black Tea Improves Endothelial Function in Renal Transplant Recipients  
*M.R. Ardalan, M.K. Tarzamni, M.M. Shoja, R.S. Tubbs, B. Rahimi-Ardabili, K. Ghabili, and H.T. Khosroshahi*

## LIVER TRANSPLANTATION

### Outcomes

- 1145** Right Lobe Adult Living-Donor Liver Transplantation  
*S. Sevmis, G. Moray, N. Savas, A. Torgay, B. Bilezikci, and M. Haberal*
- 1149** Living-Donor Liver Transplantation: Results of a Single Center  
*R. Emiroglu, S. Sevmis, G. Moray, N. Savas, and M. Haberal*

## CONTENTS CONTINUED

- 1153** Liver Transplantation for Small Babies  
*H. Karakayali, F. Ozcay, S. Sevmis, N. Savas, and M. Haberal*
- 1157** Pediatric Liver Transplantation for Acute Liver Failure  
*H. Karakayali, Y. Ekici, F. Ozcay, B. Bilezikci, G. Arslan, and M. Haberal*
- 1161** Duct-to-Duct Biliary Reconstruction in Pediatric Liver Transplantation: One Center's Results  
*M. Haberal, S. Sevmis, R. Emiroglu, H. Karakayali, and G. Arslan*
- 1164** Higher Graft-to-Host Ratio May Decrease Posttransplant Mortality in Patients With a High MELD Score  
*R. Emiroglu, U. Yilmaz, M. Coskun, H. Karakayali, and M. Haberal*
- 1166** Liver Transplantation for Autoimmune Hepatitis: A Single-Center Experience  
*H. Khalaf, W. Mourad, Y. El-Sheikh, A. Abdo, A. Helmy, Y. Medhat, M. Al-Sofayan, M. Al-Sagheir, and M. Al-Sebayel*
- 1171** Expanded Criteria for Hepatocellular Carcinoma and Liver Transplantation  
*G. Moray, F. Karakayali, U. Yilmaz, F. Ozcay, B. Bilezikci, and M. Haberal*
- 1175** Computed Tomography Volumetric Follow-up of Graft Volume in Living Related Liver Recipients  
*N. Uslu Tutar, İ. Kirbaş, A. Öztürk, Ş. Sevmiş, E.M. Kayahan Ulu, M. Coşkun, and M. Haberal*
- 1178** Multidetector Computed Tomographic Angiography Findings of Splenic Artery Steal Syndrome in Liver Transplantation  
*I. Kirbas, E.M.K. Ulu, A. Ozturk, M. Coskun, A. Harman, E. Ogus, and M. Haberal*
- 1181** Does Donor's Fatty Liver Change Impact on Early Mortality and Outcome of Liver Transplantation  
*S. Nikeghbalian, S.M.R. Nejatollahi, H. Salahi, A. Bahador, B. Sabet, H. Jalaeian, B. Geramizadeh, S.M. Dehghani, and S.A. Malek-Hosseini*
- 1184** Intraoperative Transhepatic Biliary Catheter Insertion Technique for Biliary Reconstruction: Early Results  
*M. Haberal, H. Karakayali, S. Sevmis, F. Boyvat, A. Torgay, and U. Yilmaz*

### Complications

- 1187** Predictors of Immediate Tracheal Extubation in the Operating Room After Liver Transplantation  
*P. Zeyneloglu, A. Pirat, M. Guner, A. Torgay, H. Karakayali, and G. Arslan*
- 1190** Dermatologic Complications After Liver Transplantation: A Single-Center Experience  
*G. Hassan, H. Khalaf, and W. Mourad*
- 1195** Early Hepatic Artery Thrombosis After Liver Transplantation: Diagnosis and Treatment  
*S. Nikeghbalian, K. Kazemi, H.R. Davari, H. Salahi, A. Bahador, H. Jalaeian, M.B. Khosravi, S. Ghaffari, M. Lahsaee, M. Alizadeh, A.R. Rasekh, S.M.R. Nejatollahi, and S.A. Malek-Hosseini*

## CONTENTS CONTINUED

- 1197** The Effect of Clamping of Inferior Vena Cava and Portal Vein on Urine Output During Liver Transplantation  
*M.B. Khosravi, H. Jalaeian, M. Lahsai, S. Ghaffaripour, H. Salahi, A. Bahador, S. Nikeghbalian, H.R. Davari, M. Salehipour, K. Kazemi, S.M.R. Nejatollahi, S. Shokrizadeli, S. Gholami, and S.A. Malek-Hosseini*

### IMMUNOSUPPRESSANTS

- 1201** Effect of Rapamycin on Wound Healing: An Experimental Study  
*Y. Ekici, R. Emiroglu, H. Ozdemir, D. Aldemir, H. Karakayali, and M. Haberal*
- 1204** An Assay for the Determination of Sirolimus Levels in the Lymphocyte of Transplant Patients  
*M. Masri, S. Rizk, A. Barbari, A. Stephan, G. Kamel, and M. Rost*
- 1207** Lymphedema: An Unusual Complication of Sirolimus Therapy  
*T. Al-Otaibi, N. Ahamed, M.R.N. Nampoory, N. Al-Kandari, P. Nair, M.A. Hallm, T. Said, M. Samhan, and M. Al-Mousawi*
- 1211** Tacrolimus-Related Seizure in the Early Postoperative Period After Liver Transplantation  
*S. Sevmis, H. Karakayali, R. Emiroglu, H. Akkoc, and M. Haberal*
- 1214** Pharmacokinetics, Efficacy, and Safety of Iminoral Compared With Neoral in Healthy Volunteers and Renal Transplant Recipients  
*M. Sayyah, H. Argani, G.H.R. Pourmand, H. Amini, and A. Ahmadiani*
- 1219** Low-Dose Versus High-Dose Cyclosporine Induction Protocols in Renal Transplantation  
*A. Ghafari, K. Makhdoomi, P. Ahmadpour, A.T. Afshari, M.M. Fallah, and P.S. Rad*
- 1223** Cyclosporine Trough (C0) and 2-Hour Postdose (C2) Levels: Which One Is a Predictor of Graft Loss?  
*E. Nemati, B. Einollahi, S. Taheri, M. Moghani-Lankarani, E. Kalantar, N. Simforoosh, M. Nafar, and A.R. Saadat*
- 1225** Single Daily Dose Administration of Cyclosporine in Renal Transplant Recipients  
*M. A. Halim, T. Said, T. Al-Otaibi, S. Eleawa, H. Al-Maged, A.E. Gawish, P. Nair, I. Al-Muzairai, M.R.N. Nampoory, and M. Al-Mousawi*
- 1228** Effect of Orange and Tangerine Juice on Cyclosporine Levels in Renal Transplant Recipients  
*H. Sorkhi, F. Oliaei, A.A. Moghadamnia, M. Pouramin, and A.R. Firoozjahi*
- 1231** Acid-Base Status Determines Cyclosporine-Induced Hypercalciuria  
*M. Zahmatkesh, M. Kadkhodaei, R. Ghaznavi, and M. Mahdavi-Mazdeh*
- 1233** Bioavailability of a New Generic Formulation of Mycophenolate Mofetil MMF 500 Versus CellCept in Healthy Adult Volunteers  
*M.A. Masri, S. Rizk, M.L.E. Attia, H. Barbouch, and M. Rost*
- 1237** Changing Treatment Protocol From Azathioprine to Mycophenolate Mofetil: Decrease in Renal Dysfunction, Increase in Infections  
*V. Pourfarziani, Y. Panahi, S. Assari, M. Moghani-Lankarani, and S.-H. Saadat*

## CONTENTS CONTINUED

- 1241** Optimization of Immunosuppressive Drug Monitoring in Children  
*G. Filler*

### OTHER ORGAN OR CELL TRANSPLANTATIONS

- 1247** The Impact of Renal Failure on Survival Following Cardiac Transplantation  
*A. Sezgin, T.H. Akay, B. Gültekin, S. Özkan, N. Özdemir, and S. Aşlamacı*
- 1250** Xenograft Transplantation in Congenital Cardiac Surgery at Baskent University: Midterm Results  
*S. Ozkan, T.H. Akay, B. Gültekin, A. Sezgin, K. Tokel, and S. Aslamaci*
- 1255** Comparison of Early Outcome and Histologic Findings of Enteric Drainage With Bladder Drainage in Pancreas Transplantation of Dogs  
*H. Salahi, S. Nikeghbalian, A.R. Shamsaee, E. Kheradmand, B. Sabet, H. Jalaeian, B. Geramizadeh, N. Tanideh, and S.A. Malek-Hosseini*
- 1257** The First 2 Years of Clinical Experience With Peripheral Blood Stem Cell Transplantation for Various Hematological Malignancies: Results From a Single Baskent University Center  
*H. Ozdogu, C. Boga, E. Kizilkilic, I. Kozanoglu, S. Karakus, F.I. Sahin, D. Unalan, and M. Haberal*

### CASE REPORTS

- 1263** Acute Renal Failure Due to Leptospirosis in a Renal Transplant Recipient: A Brief Review of the Literature  
*M. Khosravi and B. Bastani*
- 1267** Complete Regression of Cutaneous B-Cell Lymphoma in a Renal Transplant Patient After Conversion From Cyclosporin to Sirolimus  
*N. Mohsin, M. Budruddin, P. Kamble, M. Khalil, A. Pakkyarra, A. Jha, E. Mohammed, H. Ahmed, J. Ahmed, S. Thomas, J.M. Campistol, and A. Daar*
- 1272** Retinal Injury as an Early Manifestation of Posttransplant Thrombotic Microangiopathy: Recovery With Plasma Exchanges and Conversion to Sirolimus—Case Report and Review of the Literature  
*N. Mohsin, C. Nooyi, A. Jha, M. Budruddin, P. Kamble, M. Khalil, A. Pakkyarra, E. Mohammed, H. Ahmed, and A. Daar*
- 1276** Post Renal Transplant Castleman's Disease Resolved After Graft Nephrectomy: A Case Report  
*T. Al Otaibi, A. Al Sagheir, D. Ludwin, and R. Meyer*
- 1278** De Novo Crohn's Disease in a Renal Transplant Recipient  
*M.A. Halim, T. Said, P. Nair, I. Schmidt, A. Hassan, K.V. Johny, I. Al-Muzairai, M. Samhan, M.R.N. Nampoory, and M. Al-Mousawi*
- 1280** Author Index