

Poster Presentations

Education

EP20 THE SOCIAL EDUCATIONAL CAMPAIGN PROMOTING DONATION AND ORGAN TRANSPLANTATION IN LESSER (MALOPOLSKA) REGION IN POLAND

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Background: For many years it has been observed the shortage of donors per million in Malopolska region (4-6 donors/million of population). Last years there were reported only 12-15 of local donors. All possible donors referred to us by Polish Transplant Coordinating Center were far away from the transplant center. This caused prolongation of total ischaemia time and reducing total number of heart transplantation.

Methods: To change this situation in June 2005 we proposed and created the first social educational campaign in Malopolska titled "Do not take your organ to heaven, we need them here".

To promote campaign we've started cooperation with:

- 17 newspaper titles
- 3 TV station
- 5 radio stations
- 2 information agencies
- 14 websites

We created own interactive website (e-mail box, newsletter, discussion forum).

They have been published 76 articles in the magazines and on The Internet, 12,5 hours of radio broadcasts and 2,10-hours TV program.

There have been broadcast 225 TV spots in two versions and 955 spots in radio stations. On the website Interia.pl 500.000 billboards of the campaign appeared. In the most important point in Malopolska there have appeared mega-boards of that campaign since October 2005. 170 000 of "The certificate of the will" have been distributed to promote that campaign. The 5 special trainings were held for doctors and nurses involved in organ procurement.

Results: 1. There is a deep understanding and support of mass media for presented idea.
2. 98% of people support campaign, 82% of people accept donation.
3. Due to that campaign, we've observed the increase activity of individual hospital detecting donors in our region.
4. We will continue that campaign - achievement of aim will be adjourn and observe in long-term.

EP21 "ALMA" EDUCATIONAL PROJECT

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ALMA Project aims mainly at: updating healthcare staff (doctors and nurses) on the issues related to organ donation, management and allocation; advising them both theoretically and practically on how to deal successfully with everyday issues; creating a functional nursing model at coordination level, by promoting strategies aiming at keeping or improving consent to donations.

Methods: Theoretical 3-day lessons are organized as follows:

Day 1: Psychological development, with reference to death statement and request for consent;
Days 2-3: Practical organization of donation process focussing mainly on everyday issues.

Practical training days on the above mentioned nursing model are then organized, following a request by donation centres, under the supervision of a Transplant Reference Centre (TRC) tutor.

Courses are held at each donation centre, thus favouring the staff's attendance and reducing organizational problems.

Results: The project has been held in 20 ICUs, with the participation of 356 healthcare workers (doctors and nurses) and 19 teachers (doctors and nurses), 5 of whom permanently involved.

The permanent staff is composed by 2 psychologists, a doctor, and 2 coordinator nurses.

The staff involved by turns includes doctors and nurses from the various donation centres.

All participants have given very good opinions on the training project and both role-playing activities and final tests carried out during the course have aroused very high interest in the issues developed.

Conclusions: As the proposed nursing model can be adapted to different situations, this will certainly assure uninterrupted high-quality healthcare during the donation process.

Moreover, ALMA Project has favoured a closer examination of technical, organizational and management aspects throughout the donation process.

Finally, it has stressed the important role of nurses working in close connection to the local medical coordinator.

EP22 SAVING SKIN

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Renal transplant patients are at an increased risk of developing skin cancer. We set up a nurse-led skin surveillance clinic to run alongside our usual renal transplant clinics.

A renal transplant specialist nurse underwent training from a dermatology department. Training involved full skin assessment, sun protection advice and lesion identification with the aid of a siascope.

The siascope is a useful tool to aid diagnosis of skin cancer at this sub-clinical level.

The aim of the clinic is to offer annual skin surveillance, assess patient risk and offer sun protection advice. The siascope is used to help identify any suspicious lesions which are then referred to a dermatologist for treatment.

Patients are given an educational leaflet reinforcing the information already given. They are encouraged to be skin aware and drop in to clinic at anytime if they have concerns.

Setting up a nurse-led skin surveillance clinic within our transplant unit has had many advantages for patients. It provides a streamlined, drop-in service, patient support, improved early detection, diagnosis and treatment of skin cancer.

In the future, with improved patient awareness we hope to see a reduction in the number of skin cancers in our transplant patients.

EP23 EFFECTIVE INTERVENTIONS FOR IMPROVED ORGAN DONATION PRACTICE – AN INTERNATIONAL PERSPECTIVE

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Purpose: Every three years the Dutch Government requires a thorough evaluation of the Law on Organ Donation that was implemented in the Netherlands in 1998. Part of the Third Evaluation was a systematic inventory of successful interventions to increase organ donation. There are two main categories of interventions to increase the number of donors: public information campaigns and interventions in the hospital environment. Which of these interventions are most successful in increasing donor numbers has not been systematically studied before.

Method/Materials: A systematic review of the international literature that has appeared in the period January 1995 - July 2006 was carried out. Publications were included in the review when the outcomes measures for public information campaigns were 'registration as a donor' and 'family discussion about organ donation', and for the hospital studies the 'percentage of family consents'. Publications were only included if actual interventions were carried out, the effects of this intervention were described and if the study met certain methodological criteria, such as the introduction of control conditions.

Results: Only a few of the originally more than 5000 publications about organ donation were eligible for closer review and met the strict criteria on contents (relevance) and methodology (study design). Clear suggestions for public information campaigns and for interventions aimed at either the hospital environment or the professional staff can be derived from the results of this study. Guidelines for the development of successful interventions will be provided.

EP24 BRAIN DEATH SIGNIFICANCE JOINED AT THE PUBLIC UNIVERSITY HOSPITAL

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Introduction: Considering lung and cardiac abiotical criteria that culturally standardize our death diagnosis, there is, nowadays, with medicine applied technological development, a silent revolution. Reanimation brought to discussion the acceptance of neurological criteria to death among physicians, it is "the body's death as a whole". Brain death concept has been an issue of great scientific controversy, making difficult the establishment of uniform criteria for the diagnosis. It is also important to remember other influences, such as philosophical, religious and cultural.

Objective: Motivate reflections about criteria and norms of Brain Death and implications in contemporary context.

Methods: Review the concepts in the literature and pub med using brain death as key word and donation.

Results: we live, nowadays, "death's taboo", with the myth of immortality at one side, and in the other hand the forgotten immaterial part of the human being, which reflect in modern men's daily life, who show their selves unhappy and psychologically immature; this scenery is fed up by death's "hospitalization". In this context, concepts related to Brain Death are developed; it is also important to remember other aspects, like ethical, legal, financial and humanistic ones.

Conclusion: there is need of reflection about the theme and it is physicians' role, guided by scientific update and constant discussion, to position their selves above all about brain death's issue, clearing to society the steps of death and Brain Death's significance in this.

EP25 ISO 9001:2000 CERTIFICATION OF TRANSPLANT REFERENCE CENTRE OF THE EMILIA-ROMAGNA REGION (CRT-ER)

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In 2005 CRT-ER decided to implement Quality Management System standards by applying the ISO 9001:2000 principles. ISO standards will help the organization to improve the processes management and service's performance, to enhance customers satisfaction and all users expectancy. CRT-ER will receive the certification in 2007.

Methods: Through the certification CRT-ER aims at improving the organization management system. CRT-ER implemented some fundamental elements of a QMS as procedures adoption, work methodologies, evaluation tools, roles and responsibilities that ensure a reliable management of the processes.

The Quality Department of the University Hospital of Bologna helped CRT-ER to develop all activities needed to comply with ISO principles, and late on 2006 CRT-ER received a first internal inspection to assess the coherence between system in place and ISO standard requirements. The official inspection aimed at obtaining the ISO 9001:2000 certification will be carried out by an external organization responsible for national certifications.

Results: The establishment of the QMS, the utilization of its evaluation tools and indicators allowing a continual measurement of processes effectiveness and efficiency have already helped to improve the organization's overall performance. The results of such measurements together with an analysis of costumers satisfaction will guide us to reduce weaknesses and system boost strengths. This initiative also enhanced transparency and visibility of CRT-ER activities among all involved parties.

Conclusions: CRT-ER is a complex organization which, for an effective development of its activities, needs to integrate and interact with different processes and users. This arose the need of working with an organization-wide approach, thus with a clear definition of objectives and strategies of the leadership, identification, planning and control of the processes, aiming at pursuing a continuous improvement of organization performance and services addressed to the users of the donation-retrieval-transplantation system.

EP26 TRANSPLANT COORDINATORS SOCIETY OF TURKEY

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There are 46 organ procurement and 20 organ sharing transplant coordinators in Turkey in 2005. There were only 5 organ procurement coordinators in 1998 and no organ sharing coordinators. In 1998 and 2005 cadaveric organ rates was 0.44 pmp and 2 pmp respectively in Turkey.

According to Transplantation Society held in Rome, August 2000. (more than 25 donors pmp); there should be 1675 donors in Turkey but we had only 136 for 2005 and it was 49 in 1999.

We explained the role of transplant coordinators (TC) and 4 transplant coordinators training course at Akdeniz University since 2002. There were 27 participants at the first one from different hospitals, but unfortunately 13 of them could work as a transplant coordinator in their hospital after course. The numbers of cadaveric donors at these hospitals and Turkey increased 34% and 12% respectively according to 2001. In 1999 there were only 3 TCs but in 2001 14 hospital had actual transplant coordinator (TC) and 12 of them were a transplant center. In 2005 There are 66 TCs in Turkey and 4 of them certificated by ETCCO. 13 non-transplant center have an actual transplant coordinator. All TCs certificated by Transplant Coordinators Society of Turkey.

There are good transplant coordination systems in Antalya and Izmir as a city and also at the Aegean part as a region. Antalya, Izmir, Aegean region and Turkey's cadaveric donor procurement rate were 20 pmp, 17,2 pmp, 7,5 pmp and 2 pmp in 2005 respectively. 10 of TCs situated in Antalya, 12 of them in Izmir and 17 of them at Egean region.

We can study about the solution of organ shortage in Turkey with Health Ministry as Transplant Coordinators Society after we established. We are organising new training courses, we began to certification programme.

Recipient (1)

EP27 JUSTIFICATION FOR ANONYMITY IN A KIDNEY EXCHANGE PROGRAM

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Background: In the Netherlands, all seven centers embarked on a common simultaneous kidney exchange program in January 2004. In 2003 we interviewed potential candidates and found that all of them preferred anonymity. We wondered whether this pretransplant preference still existed after the exchange procedures were actually performed.

Methods: The study group consisted of 15 recipients (R) and 14 donors (D). The median period after surgery was 2 years. We used separate questionnaires for recipient and donor. All questions were multiple-choice.

Results: 64% (9/14) of the donors were not interested in the identity of the person to whom they had donated. One pair wanted to know more about the person to express their thankfulness. Donors were curious about the function of their donated kidney (50%). The others were afraid to become disappointed if the kidney would not function anymore. Recipients were less curious, only 27% was interested in the person from whom they had received a kidney while 6 were interested in the kidney function from the other recipient because they were partners in distress. We asked participants how they experienced exchange donation via strangers. The majority (10D,9R) reported that it felt like a direct donation; 10% even felt very comfortable about it. A number of participants (4D,2R) felt exchange a little problematic but very much worth the outcome. We asked the participants what they would do if there came a request for a meeting from the other transplanted couple. Eight participants replied positive, 4 said yes, only if my partner agrees, but 17 responded negative.

Conclusion: After transplantation/donation the majority of donors and recipients were satisfied with anonymity. For them it felt like a direct donation/transplantation. Therefore we will keep to anonymity in the Dutch kidney exchange program.

EP28 HEMATOLOGICAL AND BIOCHEMICAL TESTS AS: PREVENTIVE AND THERAPIUTIC PROTOCOLS FOR MANAGEMENT OF VIRAL INFECTIONS IN BMT PATIENTS

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Purpose: Viral infections contribute to the morbidity and mortality of many bone marrow transplant (BMT) recipients. Future preventive and diagnostic strategies against primary infection and reactivation of viruses in BMT patients are outlined. In this research for accurate detection and following the BK virus (BKV), adenovirus (ADV) and cytomegalovirus (CMV) infections in BMT pa-

tients, hematological and biochemical characteristics as a possible risk factors were compared with the prevalence of these viral infections.

Material and methods: We cohort and retrospectively studied 30 and 24 BMT recipients and donors respectively. One sample was collected pre-transplantation from BMT recipients and donors and also one sample per week for 100 days from BMT recipients post-transplantation. BKV- monoplex in house PCR and ADV/CMV –multiplex in house PCR were proceed for determination of these viral prevalence in BMT patients. For all samples hematological and biochemical characteristics were also analyzed.

Results: PCR positive results of these viral infections have significant correlations with different hematological and biochemical indexes as follow: Significant correlations were detected between hematological characteristics like; WBC count and platelet count with ADV-PCR, BKV-PCR, and CMV-PCR positive results, hemoglobin concentration with BKV-PCR and CMV-PCR positive results, and also sodium concentration with CMV-PCR positive results. Significant correlations were detected between biochemical characteristics include; ceratinin, direct bilirubin and total bilirubin levels with ADV-PCR, BKV-PCR, and CMV-PCR positive results and also liver function tests with BKV-PCR and CMV-PCR positive results.

Conclusion: For significant correlations of positive results of BKV-PCR, AV-PCR, and CMV-PCR with results of hematological and biochemical tests, monitoring of these parameters will have a critical role in management of preventive and therapeutic protocols for these viral infections in BMT recipients.

EP29 THE EFFECT OF A DANJEON BREATHING EXERCISE PROGRAM ON PHYSIOLOGICAL-PSYCHOLOGICAL STATE AND QUALITY OF LIFE OF KIDNEY TRANSPLANTATION RECIPIENTS

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It was aimed to verify the effect of physiological-psychological status as well as the quality of life applying Roy's adaptation model. It was attempted to provide DanJeon Breathing Exercise Program (DAJBEP), self-developed by its researcher, as independent nursing intervention to the kidney recipients. Volunteered 29 outpatients treated after their kidney transplants at a university hospital in the G-city were selected for the study cohorts. 15 patients agreed to practice DJBEP belonged to the experimental group, and 14 participants didn't practice DJBEP were assigned as a control group. A questionnaire, blood test, and physical strength of the research subjects were recorded before the exercises. The results of this study were summarized as the follows: 1. Total cholesterol ($p=0.005$), creatinine ($p=0.047$), grip ($p<0.001$), back muscle strength ($p=0.010$), and the sit & reach test ($p<0.001$) were statistically significant difference as a consequence. 2. The score of stress in the experimental group would be lower than the control group was supported by the statistically significant difference ($p=0.003$). 3. The score of uncertainty in the experimental group would be lower than the control group was supported by the statistically significant difference ($p=0.001$). 4. The score of self-esteem in the experimental group higher than the control group was supported by the statistically significant differences ($p<0.001$). 5. The score of quality of life in the experimental group would be higher than the control group was supported by the statistically significant differences ($p<0.001$). In conclusion, the quality of life was further enhanced. Therefore, it is proved that DJBEP is an effective nursing intervention for the kidney transplant recipients.

EP30 ECONOMIC IMPACT OF GASTROINTESTINAL MEDICATION REDUCTION FOLLOWING CONVERSION FROM MYCOPHENOLATE MOFETIL (MMF) TO ENTERIC-COATED MYCOPHENOLATE SODIUM (EC-MPS) ASSOCIATED WITH IMPROVEMENT IN QUALITY OF LIFE (QOL)

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Purpose: To determine the economic benefit of GI co-medication reduction after conversion from MMF to EC-MPS and its impact on QOL in renal transplant patients.

Methods: Renal transplant patients treated for GI symptoms successfully converted from MMF to EC-MPS were placed on a protocol to reduce or discontinue their GI co-medication. Twice a day dosing was reduced to daily dosing at baseline and further reduced to as needed at the 30 day visit. Patients on daily dosing at baseline were reduced to as needed and continued through the remainder of study. Patients were evaluated at baseline, 30 and 90 days. At baseline patients were given pocket diaries to record GI co-medication use. Cost savings due to GI co-medication reduction were calculated using published average wholesale prices. Patient Reported Outcomes (PRO) were evaluated at each visit using three questionnaires: Gastrointestinal Symptom Rating Scale (GSRS), Gastrointestinal Quality of Life Index (GIQLI) and the Psychological General Well-Being Index (PGWBI).

Results: Eighty-nine percent (54) of patients successfully reduced or discontinued their GI co-medication without worsening of symptom burden. The PRO scores remained stable over the study period except in the PGWBI which improved as shown in the table below. A balanced reduction in both PPIs and H-2 blockers was observed. This resulted in an estimated cost savings per patient of \$925-\$1850 for H-2 blockers and \$1861-\$3722 for PPIs annually.

Questionnaire	Mean Total Score		
	Baseline	30 day	90 day
PGWBI	75.3688	74.8714	82.6981*
GSRS	22.8462	23.9615	24.1346
GIQLI	116.4118	115.2353	114.9216

* $p < 0.0001$ compared to baseline and 30 day data.

Conclusions: This study demonstrates renal transplant patients converted from MMF to EC-MPS can successfully reduce GI co-medication while improving QOL and overall well-being. Considering medication coverage in the US, these savings represent a significant proportion of the patient total medication cost and in the long-term could represent considerable savings.

EP31 EFFECTS OF MMF ON CAN BY AFFECTING RHO/ROCK SIGNAL PATHWAY

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Aim: The small GTPase Rho and ROCK play an important role in graft fibrosis. This study is to investigate the effects of immunosuppressants on chronic allograft nephropathy (CAN) by affecting small GTPase Rho and ROCK signal pathway.

Methods: Male inbred F344 rat renal grafts were orthotopically transplanted into Lewis rats following the procedure of Kamada with our modification. F344 rats were also autografted. The allograft rats were first treated with CsA10mg/kg⁻¹·d⁻¹10d and then divided into 3 groups (each n=9): (1) CAN: Vehicle orally, (2) CsA: 6 mg/kg⁻¹·d⁻¹, (3) MMF: 20mg/kg⁻¹·d⁻¹. At 4w, 8w, 12w, Scr was measured and the pathological changes were accessed according to Banff 97 criteria. The expression of RhoA and ROCK-1 was determined by real-time RT-PCR and a-SMA, CTGF were observed by immunohistochemistry.

Results: As seeing Table, Scr and Banff score increased since 4w in CAN group, and obviously increased both in CAN and CsA group. The differences between CAN/CsA and autograft group were significant ($P=0.000$). Scr and Banff score in MMF group increased mildly and moderate at 8w and 12w, respectively; but were significantly lower than those in CAN/CsA group ($p<.05$). a-SMA and CTGF were observed in renal epithelium and tubular cells, respectively. Protein of RhoA and ROCK-1 were observed in mesangial cells and tubule cells and increased gradually along with CAN. There was negative correlation between RhoA/ROCK-1mRNA and Banff score ($r=-.637$, $p=.000$; $r=-.676$, $p=.000$) and Scr ($r=-.705$, $p=.000$; $r=-.756$, $p=.000$). MMF down-regulated the expression of gene and protein of RhoA and ROCK-1. CsA had little effect on the expression of gene and protein.

Table 1

		4w	8w	12w
Autograft	Scr	63.44±0.94	62.27±0.51	71.21±2.01
	Banff	0	0	0
	RhoA	11.84±0.24	12.00±0.00	11.84±0.24
	ROCK-1	22.68±0.48	22.50±0.00	22.68±0.47
CAN	Scr	110.97±55.84	275.23±23.50	516.78±31.60
	Banff	1.67±0.58	5.33±0.58	12.67±1.15
	RhoA	4.18±0.25	3.55±0.43	2.85±0.24
	ROCK-1	7.54±0.75	8.08±0.83	6.38±0.65
CsA	Scr	75.27±8.91	295.26±32.07	525.18±33.67
	Banff	1.33±0.57	4.67±1.52	13.33±1.53
	RhoA	8.05±1.25	5.68±0.24	5.17±0.25
	ROCK-1	15.20±2.38	9.71±0.64	9.00±0.00
MMF	Scr	72.41±7.04	138.26±28.45	305.94±32.92
	Banff	0.67±0.58	1.67±1.16	6.67±1.53
	RhoA	9.21±0.64	8.02±0.42	6.53±0.42
	ROCK-1	17.20±0.65	12.72±0.85	10.53±0.42

Conclusion: We demonstrate that abnormal expression of RhoA and ROCK-1 signal pathway may play a role in CAN. MMF can attenuate CAN by down-regulating the expression of RhoA and ROCK-1.

EP32 A SINGLE-DOSE DACLIZUMAB INDUCTION PROTOCOL IN RENAL ALLOGRAFT RECIPIENTS: A CHINESE SINGLE CENTER EXPERIENCE

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Objective: This study prospectively compared immunoprophylaxis with a single dose of daclizumab vs. noninduction in kidney transplant recipients treated with cyclosporine A(CsA), mycophenolate mofetil(MMF) and prednisone-based immunosuppression regimen to observe the effects of a single-dose regimen of daclizumab for prevention of acute rejection in Chinese renal allograft recipients.

Methodology: A total of 118 renal transplant recipients were randomized into daclizumab induction therapy group (daclizumab group,n=58) and no induction group(control group,n=60). Daclizumab group received daclizumab (a single-dose 1 mg/kg of ideal body weight,intravenous infusion) 2 hours before operation. There were no induction therapy in the control group.

Results: There was no significant difference in baseline parameters at randomization between the two groups. The mean time to the first episode of acute rejection was 41.2 ± 3.2 days for the daclizumab group and 11.2 ± 4.6 days for the control group. Number of first biopsy-confirmed acute rejection episodes during the 6-months after transplantation were significantly different in the daclizumab group(7,12.1%) and in the control group(14,23.3%), $P < 0.001$. At the end of 12 months, patient and graft survival was 100% in the groups receiving with or without daclizumab. It notes that the incidence of infection, including serious infection, in the daclizumab group was similar to that in the control group,17.2% and 20.0%, respectively.

Discussion: This study has shown that a single-dose daclizumab can prevent effectively acute rejection in Chinese renal allograft recipients.

EP33 CONVERSION FROM CYCLOSPORINE TO TACROLIMUS IN RENAL ALLOGRAFT RECIPIENTS WITH CHRONIC ALLOGRAFT NEPHROPATHY: A RETROSPECTIVE SINGLE CENTER STUDY

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Objective: This study evaluated the efficacy and safety of tacrolimus (FK506) as secondary intervention in cyclosporine A (CsA) treated kidney transplantation patients with chronic allograft nephropathy (CAN).

Methods: 61 patients who received a cadaveric kidney transplantation in our unit during Jan.1995 to Jan.2004 more than 12 months prior to study enrollment and who were being treated with CsA-based immunosuppressive treatment were included, all patients received allograft biopsy and were diagnosed as chronic allograft nephropathy (CAN). Patients were differentiated according to following regimen. Patients were either converted to tacrolimus (FK506 group, n=31) or remained on their initial CsA-based immunosuppression (CsA group, n=30). The clinical data at study entry and after 3,6 and 12 months including serum total cholesterol (TC), low density lipoprotein (LDL), high density lipoprotein (HDL), total triglyceride (TG), blood urea nitrogen (BUN), creatinine (Scr), albumin were recorded during the followed over 12 months' survey. The rate of decline of renal function before and after the FK506 conversion was represented by the regression line (slope) of the reciprocal of serum creatinine versus time.

Results: Trough TC, TG and LDL levels remained unchanged in CsA group while statistically reduced in FK506 group. Quantity of daily urine protein excretion was significantly reduced and serum albumin levels were markedly elevated in the FK506 group. Renal function was markedly improved and less allograft failure was observed in FK506 group.Graft survival rate was significantly increased in FK506 group(93.5% vs. 80.0%) follow-up one year.

Conclusion: FK506 treatment markedly improved abnormality in lipid profile post-transplantation and graft renal function, and was excellent in the reduction of typical CsA-associated cosmetic side effects. Conversion from CsA to FK506 showed beneficial effects on the retardance of graft dysfunction with chronic allograft nephropathy.

ELBP06 UNRELATED LIVING DONATION IN SOUTH AFRICA: LEGISLATION AND CHALLENGES

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Aim: Unrelated living donation (URLD) has been performed in South Africa for more than 10 years. However, URLD accounts for less than 3% of our national renal transplants, as opposed to related living donation (RLD) which

accounts for 36%. In an effort to understand this, close attention was paid to the challenges and legislation surrounding this process.

Method: The national renal transplant statistics, as collated by the Organ Donor Foundation of South Africa, was analyzed from 2001-2006. The legislation and policy guidelines were studied and a comparison made with the United Kingdom. A retrospective analysis of potential donors who did not complete the process was performed.

Results: A total of 1860 renal transplants were performed during this 6 year period. 1131 (60%) were from cadaver donors. This includes simultaneous kidney-pancreas transplants. 675 (36.6%) were from related living donors and 54 (2.9%) were from unrelated living donors. Legislation is thorough and protective of both the donor and recipient, but the process is slow moving (3 months) and understaffed. Donors who withdrew from the process cited a variety of reasons, predominantly stress, medical unsuitability and frustration due to delays by the authorization process.

Conclusion: URLD accounts for less than 3% of our national transplant statistics and the figure could probably increase with improvements in the authorization process. A time frame of 3 months is considered excessive. Addressing the patients' stress through extensive education and counseling should impact positively on the need for unrelated organ donation.

Recipient (2)

EP34 ACCESS OF DOUBLE LISTED PATIENTS TO CADAVERIC KIDNEY TRANSPLANTATION

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In Portugal, each patient candidate to cadaveric kidney transplantation can be listed in two different waiting lists from different transplant centres. Nevertheless there are some patients who don't use this opportunity.

In our sample we have 736 patients 18 years old or older entered for first time in the national program for kidney transplantation in the North of Portugal waiting list, between 1998-01-01 and 2002-12-31. For these patients we collected the time since they entered in the waiting list to the date of renal transplantation. Follow-up period ended in 2006-07-01. For each patient we segregated observation time while single-listed from time while double-listed, so we obtained a total of 1115 observations. As predictors covariates to renal transplant we studied age, sex, place of residence, ABO blood type, time in dialysis until transplantation, kind of dialysis and year of entrance to waiting list. Univariate analysis was performed using Kaplan-Meier curves. Multivariate Cox proportional hazards regression was used to estimate the risk of been transplanted while double-listed in comparison to be single listed, adjusting for the covariates in this study.

The risk of been transplanted with a cadaveric donor while double-listed is twice bigger than while single-listed (adjusted result for the others covariates in the study). Stratifying the data for double-listed and single-listed we obtained that: patients with blood type O are less likely to be transplanted when compared to the others patients; and patients younger than 35 years with less than 60 months of dialysis are at higher risk of been transplanted. Patients who don't take the opportunity of been double-listed are in a great disadvantage when compared to others. Guarantee that all patients are double-listed is a way to maintain fairness in the access to cadaveric kidney transplantation.

EP35 CADAVERIC KIDNEY TRANSPLANTATION WAITING LIST: SOCIODEMOGRAPHIC PREDICTORS FOR SINGLE LISTING

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Kidney transplantation is considered by many to be the ideal treatment modality for end stage renal disease (ESRD) patients, because it is a highly successful therapy and can substantially improve quality of life. In Portugal each patient with ESRD can be listed in two different waiting lists from two different transplantation centres. In spite of this opportunity many patients are listed in only one waiting list.

Our sample has 700 patients 18 years old or older entered for cadaveric kidney transplant waiting list in the north of Portugal between 1998-01-01 and 2002-12-31. For each patient we assessed the waiting time as the time between entrance in waiting list and time when they were retired from waiting list. Follow-up time ended in 2006-07-01. For this study we only considered patients with at least 2 months in waiting list. We classified as single-listed all patients which time when listed in only one transplantation centre was at least 80% of the respective overall waiting time. Age when entered in waiting list, sex, place of residence, time in dialysis when entered in waiting list, kind of dialysis, ABO blood type, year of entrance in waiting list and first transplantation centre where patients were listed are the studied predictors. χ^2 -test and

logistic regression were used to conclude about association between the predictors and single-listed.

Patients older than 60 years old, with more than 30 months of dialysis and blood type other than O are at higher risk of been single-listed. Patients entered in the waiting list between 1998 and 2001 are at higher risk of been single-listed in comparison with patients entered in 2002. All these results are independent from each others once they remain statistically significant in the logistic regression model.

EP36 ANALYSIS OF KIDNEY FUNCTION IN ORTHOTOPIC LIVER TRANSPLANTATION PATIENTS

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Background: Chronic renal failure (CRF) is a well-known complication in organ transplantation. Therapy with calcineurin inhibitors is one of the main causes of post-transplant kidney failure. The scope of our study was to determine the incidence of CRF and to identify whether a correlation exists between the three different methods of kidney function assessment: cystatin C, serum creatinine and creatinine clearance.

Materials: The study population included 152 adults who underwent orthotopic liver transplant in our experience from July 1999 to December 2004. The group included 108 men and 48 women. The initial immunosuppression protocol for all patients is based on the use of tacrolimus and corticosteroids.

Kidney function was assessed measuring serum creatinine levels at 1, 6 months and 1 year. In patients with kidney failure (creat. >1.5 mg/dl) 1 year post-transplant, kidney function was reassessed measuring serum creatinine, creatinine clearance and cystatin C.

Results: The survival of CRF patients 1 year post-transplant was 70%. Patients with diabetes mellitus at the time of transplant had a risk of developing CRF one year post-transplant 2 time greater than those who no diabetes. Basic immunosuppressive therapy involved a 3.2 time greater risk of developing CRF 6 months post-transplant.

The correlation between creatinine and cystatin C proved to be extremely significant. A significant yet weaker correlation was noted between creatinine clearance and cystatin C. No significant relation was found between 24h proteinuria and cystatin C.

Conclusions: CRF failure, due to tacrolimus, is a common cause of morbidity in orthotopic liver transplantation patients, it can be identified within 1 year post-transplant.

Cystatin C seems to be the most sensitive method for lab diagnosis of renal failure in liver transplant recipients thus allowing a timely identification of alterations in kidney function caused by nephrotoxic drugs.

EP37 TREATMENT OF SINGLE HEPATOCELLULAR CARCINOMA (HCC): EFFICACY OF TRANSCATHETER EMBOLIZATION/CHEMOEMBOLIZATION (TAE/TACE)

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Purpose: The efficacy of TAE/TACE on single HCC is not clearly defined. The aim of this study was to investigate the efficacy of TAE/TACE in cirrhotic patients with single HCC not suitable for surgical resection and percutaneous ablation therapy.

Methods: A cohort of 176 consecutive cirrhotic patients with single HCC undergoing TAE/TACE was reviewed; 162 patients had at least one image examination (triphasic contrast-enhanced MRI or helical CT scan) after treatment and were included into the study. TAE was performed with Lipiodol followed by Gelfoam embolization; TACE was performed with Farmorubicin and followed by Lipiodol and Gelfoam embolization.

Results: Patients characteristics were: mean age, 62 years; male/female 117/45; MELD 8.7 ± 2.3 ; mean HCC size, 3.6cm (range 1.0-12.0 cm). HCC size class was ≤ 2.0 cm, n=51; 2.1-3.0 cm, n=35; 3.1-4.0 cm, n=29; 4.1-5.0 cm, n=22; 5.1-6.0 cm, n=11; and > 6.0 cm, n=14. Patients received a total of 368 TAE/TACE (mean 2.4 ± 1.7). Complete tumor necrosis was obtained in 94 patients (58%), massive (90-99%) necrosis in 16 patients (10%), partial (50-89%) necrosis in 18 patients (11%) and poor (<50%) necrosis in the remaining 34 patients (21%). The rate of complete necrosis according to the HCC size class was: 69%, 69%, 52%, 68%, 50% and, 13% for lesions of ≤ 2.0 cm, 2.1-3.0cm, 3.1-4.0cm, 4.1-5.0cm, 5.1-6.0cm, and > 6.0 cm, respectively.

Conclusion: Our study showed that in cirrhotic patients with single HCC smaller than 6.0cm, TAE/TACE produces complete local control of tumor in a significant proportion of patients. TAE/TACE is an effective therapeutic option in patients with single HCC not suitable for surgical resection or percutaneous ablation therapies. Further studies should investigate if the new available embolization agents or drug eluting beads may improve the effect on tumor necrosis.

ELBP07 IRODAT – THE INTERNATIONAL REGISTRY OF ORGAN DONATION AND TRANSPLANTATION

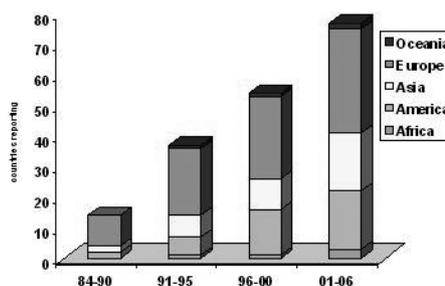
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Purpose: IRODaT was created in 2001 by Transplant Procurement Management (TPM) to collect the representative donation-transplantation activity values around the world. In a few years it has become a powerful tool that allows consulting the values collected and updated by IRODaT reporters, in most cases board members of donation and transplantation national organizations. The aim of this abstract is to show the methodology of managing an international database that is constantly updated and available in the Internet.

Methodology: Each early January, TPM contacts the IRODaT reporters from different countries and requests the preliminary data of the past year donation and transplantation activity. They report on-line by means of a username and password to include their data directly in the TPM website. The information is automatically added and displayed in tables so everyone can consult them without delay. The information can be always updated, reviewed and corrected by the reporter, who is only allowed to modify his own country data. The reliability of values is guaranteed by including the name and contact details of the reporters so users can contact them if any clarification is required.

The information is compiled in absolute numbers and pmp rates, and displays the organ and tissue donation and transplantation activity from living and cadaveric donors, considering each organ and tissue and the most common combinations.

Results: IRODaT started the annual call in 2001 requesting available previous rates. Nowadays the database shows information since 1984 and from more than 70 countries from the five continents, which represents more than 40.000 entries.



Conclusions: IRODAT provides useful data for epidemiological and demographic studies covering a consistent up-to-date global situation on organ and tissue donation, transplant donors sources and types. Moreover it helps to increase public awareness, thanks to its easy and free access at www.tpm.org.

ELBP08 TPM TISSUE TRAINING: THE POLISH EXPERIENCE

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Purpose: Technical and biomedical advances have promoted the tissue bank activity growth around the world, leading to a pressing need for the consolidation of concepts and its regulation.

Transplant Procurement Management (TPM) is an international organization to train health professionals in all the main steps of the donation and transplantation that in the last years has worked toward the development of a training system related to tissue bank activity.

Since 2004 Poland aims to create a National Centre for Tissue and Cell Banking (NCTCB), an organization to coordinate and promote the tissue bank activity including the professional training.

Methodology: TPM and NCTCB have designed and implemented a full training program addressed to four health professional profiles involved in tissue banking practice: Tissue procurers, Tissue bank technicians, Tissue bank managers and Tissue graft clinical users.

Courses were structured in theoretical and practical sessions, including simulations and study debates. All educational material has been adapted to the Polish tissue bankers needs and translated into Polish. According to the TPM methodology, the courses have been implemented by International faculty members. Thanks to the simultaneous translation, the rate of participation and interaction has become one of the key points of these training programs.

Results: Four specific courses have been developed in Warsaw (Poland) according to the profiles defined: Donor Screening and Classification Training (2 courses, 55 participants), Tissue Bank Technical Training (2 courses, 50 participants), Tissue Bank Management Training (25 participants) and Tissue Graft Users Training (82 participants).

Conclusion: The analysis of the course evaluations and the assessment questionnaires answered by the participants have shown a high impact score concerning the contents, faculty skills and applicability. Nevertheless, further studies have to be done in order to determine the long-term growth in the Polish tissue banking development.

ELBP09 **COMPARISON SURVEY ON THE JOB CHARACTERISTICS BETWEEN JAPANESE AND EUROPEAN IN-HOSPITAL COORDINATORS**

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Purpose: To grasp the current situation of in-hospital coordinators about their daily task and clarify how it is related to their working motivation in Japan (JP) and Europe (EU) to find a key solution for increasing organ donation in JP.

Method: A questionnaire which consists of 20 specific questions about the job characteristics of in-hospital coordinators and 10 questions about their back-

ground was distributed to 108 coordinators in JP and 100 in EU. Replies were collected by post in JP and by e-mail in EU.

Results: 73 replies from JP and 43 from EU were collected. Regarding background between JP and EU, significant difference was found in the professional category (medical professionals account for 100% in EU, while 64.4% in JP), field of specialty (ICU/Emergency. 44.2% in EU, 5.5% in JP), experience as an in-hospital coordinator (average period: 7.3 yr in EU, 2.8 yr in JP), percentage of work as coordinator out of total job (37.2% work less than 25% in EU, 100% in JP).

95.3% of coordinators in EU work with satisfaction of their job, while 8.3% in JP. 97.7% of them are proud of their work in EU, while 37.5% in JP. 100% of them in EU work with professionalism, while only 13.9% in JP.

Conclusion: Compared with Japanese coordinators, coordinators in EU can carry out their job with a sense of satisfaction, pride in their work and professionalism. Creating clear job descriptions for Japanese coordinators, training them on the whole process of organ donation and establishing a network with different transplant teams are essential to improve Japanese situation.