

## Oral Presentations

### Difficult donor

#### EO01 CLINICAL CHARACTERISTICS OF THE ORGAN DONOR WITH BACTEREMIA

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**Introduction:** The presence of bacterial infection in the donor is a common finding and could be transmitted to the recipient. To safely expand the donor pool its relevance should be evaluated.

**Material and methods:** We describe the clinical characteristics of organ donors grafted in our center, between 1997 and 2006, with a bacteremia detected in blood cultures obtained during organ procurement.

**Results:** 1353 organ donors were evaluated: 75 were Non-Heart-Beating Donors type II and the rest Brain Death donors. Only 186 donors (14%) presented valid bacteremia during retrieval, with a mean age of 49.8 years old (R 12-86, DE 18) and 63% males. Causes of death were Cerebro-Vascular Accident-CVA 60%, Cranio-Encephalic Trauma-CET 25% and other causes 15%. The average length of ICU stay were 3 days (RIQ: 2-7). 29% of donors presented previous infectious complications (90% from respiratory origin). The bacteria isolated in blood cultures was Coagulase negative *Staphylococcus* 46.2%, followed by *S. aureus* 15%, *Streptococcus* group viridans 9.1%, Enterobacterias 9%, *Enterococcus faecalis* 7.5% and Gram-negative bacilli non fermentative 6.2%. In 3.1% a polymicrobial bacteremia were detected. The bronchial aspiration culture were positive in 50% of cases and the urine culture in 8.6%. In 17% of donors the germen isolation was coincident between blood and bronchial cultures, however only 2% with the urine culture and in 1 case with both.

Table 1. Type of Microorganism more commonly isolated during organ retrieval

Type of Microorganism	Blood culture n (%)	BAC n (%)	Urine culture n (%)
Staphylococcus coagulase negative	86 (46.2)	3 (1.6)	
Staphylococcus aureus	28 (15.1)	22 (11.8)	
Streptococcus group Viridans	17 (9.1)		1 (0.5)
Enterococcus faecalis	14 (7.5)		3 (1.6)
Pseudomonas spp	6 (3.1)	11 (5.9)	
Escherichia coli	5 (2.7)	5 (2.7)	2 (1.1)
Enterobacter cloacae	3 (1.6)	5 (2.7)	1 (0.5)
Acinetobacter spp	3 (1.6)		1 (0.5)
Klebsiella spp	2 (1.1)	3 (1.6)	
Candida spp	2 (1.1)	9 (4.8)	4 (2.2)
Polimicrobiana	6 (3.1)	25 (13.4)	5 (2.7)
Others	14 (7.5)	11 (5.9)	2 (1.1)
Negative	0	25 (13.4)	150 (80.6)
No sample available	0	67 (36)	17 (9.1)

**Conclusions:** The incidence of bacteremia in our cohort was 14%. The respiratory tract was the most common clinical focus, however, in 71% of cases the bacteremia did not presented a corresponding clinical origin.

#### EO02 LIVER TRANSPLANTATION FOR ADULT AND PEDIATRIC RECIPIENTS AT ISMETT: ADOPTION OF A LIBERAL POLICY OF IN SITU LIVER SPLITTING

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**Background:** We report our experience with extensive use of in situ liver-splitting for adult and pediatric patients.

**Patients and Methods:** From July 2003 to January 2007, 232 liver transplants were performed in our institute. Out of the 232 transplants, 169 (73%) were adults and 64 (27%) were pediatric patients. The liver of every donor assigned to our center was evaluated for transplantation if at least one compatible recipient with a donor-recipient body weight ratio (DRWR) of 12 or less were placed in our waiting list. The liver was procured and transplanted as a whole liver when the DRWR was 2 or less. When the DRWR was between 2 and 12, the organ was considered for split liver transplantation. The donor evaluation was based on liver function, hemodynamic and metabolic status, and macroscopic appearance of the graft.

**Results:** Out of the 169 adults, 33 recipients underwent split liver transplantation with an extended right graft (ERG); in 136 cases whole liver (WL) was used. Out of 57 pediatric liver transplant recipients 11 cases received a WL, in 7 cases an ERG, in 46 cases a left lateral segment (LLS). Twenty of them were obtained using grafts from 19 donors younger than 15 years of age.

**Conclusion:** The use of liberal policy with in situ liver splitting allowed us to expand the cadaveric donor pool, significantly eliminating pediatric waiting list mortality without penalizing the adult population.

#### EO03 A WRONG ESTIMATION OF BODY-WEIGHT, HEIGHT AND CONSEQUENT BMI, CORRELATES WITH WRONG ALLOCATION OF LIVER GRAFTS FROM DECEASED DONORS

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**Introduction:** In the allocation process of liver grafts from deceased donors, the anthropometric parameters Body weight (BW) and Height (H) correlate to graft size therefore influencing the selection of a size matched recipient. Additionally the BMI (BW/H<sup>2</sup>) can be correlated to graft quality based on data demonstrating a linear correlation of BMI and liver steatosis.

Up to date in Eurotransplant Area BW and H have being generally estimated by the local OPO's-Coordinator.

**Aim:** To demonstrate the unreliability of simple estimation of BW and H of deceased donors and the consequences on the allocation process of liver grafts.

**Material and Methods:** 14 investigators (8 physicians, 4 medical students, 2 nurses) estimated BW and H of 17 undressed patients laying supine on; their bed. After that BW and H of these patients were exactly measured by using a balance and measuring tape.

BMI was computed based on collected data which were finally analyzed using SPSS system and Microsoft office.

**Results:** The estimation of anthropometric parameters resulted being exact, over- or under- estimated at different rates and ranges (see Table 1). Additionally, among the 3 investigators' subgroups, medical students showed higher rates of estimation errors. In all 3 groups, most of errors occurred in estimating overweighted patients.

Table 1

	Exact estimation	Over estimation	Quantification of over estimation <sup>†</sup>	Under estimation	Quantification of under estimation <sup>†</sup>
BW	40%	40%	10% (1-46%)	20%	5% (1-28%)
Height	80%	18%	4% (1-14%)	2%	2% (1-8%)
BMI	39,1%	30,7%	0,5% (0,1-2,9%)	30,2%	0,5% (0,1-6,8%)

<sup>†</sup> median and range in % of exact value.

Abstract EO01 – Table 2. Univariate analysis of the risk factors of bacteremia of the more commonly isolated microorganism

	Staphylococcus aureus		Coagulase negative staphylococcus		Enterococcus faecalis		Pseudomonas		Polymicrobial	
Significance	p	OR (CI 95%)	p	OR (CI 95%)	p	OR (CI 95%)	p	OR (CI 95%)	p	OR (CI 95%)
Age < 40 years	0.012	2.85 (1.25-6.49)		NS		NS		NS*		NS
Gender (female)		NS		NS		NS		NS		NS
Length of ICU stay (>2 days)	0.021	0.36 (0.15-0.86)	0.006	2.356 (1.28-4.32)		NS		NS		NS
Cause of death: CVA		NS		NS		NS		NS		NS
Cause of death: CET		NS		NS		NS		NS		NS
BAC (+) coincident with blood culture	0.058	2.47 (0.96-6.28)	0.008	0.33 (0.14-0.75)	0.004	7.57 (1.90-30.30)		NS		NS

\*For Pseudomonas with age >50 years p: 0.046, OR 8.47 (CI 1.03-71.42)

**Conclusion:** A wrong estimation of BW and H (and consequent BMI) correlates with wrong allocation of liver grafts. Therefore the exact measurement of BW and H by means of a simple ICU balance and measuring tape should be mandatory during the allocation process of deceased donors.

#### EO04 SIMPLIFIED LUNG DONOR ASSESSMENT PROTOCOL LEADS TO PERCENTAGE OF AVAILABLE LUNGS WITH NO IMPACT ON LONG TERM SURVIVAL

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**Introduction:** There is still a large difference in the percentage of lung donors between different procurement areas and centers. The lack of suitable lungs are mainly based on restrictive acceptance criteria and erroneous exclusion criteria. Too aggressive and time consuming protocols and erroneous criteria compromise the exact donor lung potential.

**Aim of the study:** We compared the evolution of the donor lung availability in our own program. We examined the donor profiles, the potential of lung donors, rejection of in-situ lungs and clinical outcomes in two identified time periods of 24 months, with a simplified lung donor assessment protocol in the second period.

**Results:** 322 lung transplants (193 SSLTX - 129 SLTX) were performed between 01/01/92 and 31/12/06 of which 273 between 00 - 06. Lung donors offered and compared in 00 - 01=P1 (43/167(25,74%)) to 05-06=P2 (64/147(43,5%)) ( $p < .003$ ) increased. Significant differences (P1 vs P2) were seen; mean donor age (29,1 yrs vs 43.3 yrs,  $p < .01$ ); CVA as reason of death (29% vs 51%,  $p < .0001$ ); mean donor ventilation period (1.9 days $\pm$ 0.9 vs 4.1 days $\pm$ 2.7,  $p < .01$ ); mean donor pO<sub>2</sub> (mmHg) (FiO<sub>2</sub> 1.0-PEEP 5) (419.3 $\pm$ 89.8 vs 317.2 $\pm$ 189.7,  $p < .001$ ). In-situ organ rejection was significant lower (12% P1 vs 5,1% P2,  $p < .05$ ). No difference was seen in outcomes at 1 yr actuarial patient & graft survival (89% P1 vs 88.4% P2).

**Summary:** Data clearly show that there is still a large possibility to increase the lung donor potential. Without impact on outcome, these results clearly justify a more liberal approach and an obligation to offer all potential lungs. A simplified assessment protocol is key to more available lung donors, rather than aggressive and time-consuming protocols, increasing the work load for the donor hospital.

## Living donor

#### EO05 THE IMPACT OF CHANGES IN DONOR LEGISLATION ON THE LENGTH OF WORK-UP TIME FOR LIVING KIDNEY DONORS IN THE UNITED KINGDOM

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**Purpose:** The Human Tissue Act was introduced in the United Kingdom on September 1<sup>st</sup> 2006. There is concern that this new legislation may cause delays in the time taken to process live donors, as every patient must now be seen by an independent third party assessor. Prior to the Act only non-genetically related donor-recipient pairs underwent such assessments in the UK. The aim of this study was to examine the impact on of the Act on work-up time to donation for living kidney donors.

**Method:** Using a prospectively collected database of living donor kidney transplants in a single centre in the UK, we compared the time from tissue typing to transplantation, and CT angiogram to transplantation, for the year preceding the Act (1<sup>st</sup> September 2005 to 31<sup>st</sup> August 2006) and the time following the Act (1<sup>st</sup> September 2006 to 1<sup>st</sup> March 2006).

**Results:** There were 56 living donor kidney transplants performed in the study period (pre-act n=40, post-act 16). The median time from tissue-typing and CT to transplant prior to the act was 225 days (IQR 166-534) and 67 days (IQR 28-136) respectively. Following the act, work up time was not significantly longer: 339 days (IQR 184-425) from tissue typing ( $p=0.795$  Mann Whitney U test) and 62 days (IQR 40-235) from CT ( $p=0.36$  Mann Whitney U test) to transplantation. Univariate analysis of variance using log transformed data revealed that there was no effect on time to transplantation of whether the donor and recipient were related or unrelated, prior or subsequent to the Act (Tissue typing  $p=0.640$ ; CT  $p=0.574$ ).

**Conclusion:** The Human Tissue Act has produced robust assessment for all living donors and not increased the work up time for transplantation for donors as was widely predicted.

#### EO06 MOTIVATIONS OF ALTRUISTIC LIVING KIDNEY DONORS

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**Background:** Living kidney donation provides for an increasing proportion of kidney transplants, while a shift from genetically related to unrelated donors is seen. For several years we have accepted altruistic not emotionally related individuals to donate their kidney in a directed or non-directed anonymous way. We investigated the motivation of these donors.

**Methods:** We prospectively collected data from 51 individuals that made inquiries about altruistic donation. All were given written information on our protocol, were informed about the procedures and were contacted by telephone later.

One potential donor explicitly requested non-anonymity and therefore was not accepted. Three others were referred elsewhere. Nineteen had second thoughts after receiving the information and after discussions with their environment. We enrolled 28 (16F, 12M) individuals in a screening program; five had medical or psychological contra indications, three are still in screening, 18 have donated, one is planned and one withdrew consent.

**Results:** Out of the 18 altruistic donors which donated only 6 had actively responded to media attention to organ shortage and the needs of patients on the wait list. Most donors gave a number of reasons for their decision. Most (13/18) had close contacts with patients on dialysis either at the moment (N=5) or in the past (N=8) but had not been in a position to donate directly. Donating appeared to be ego-syntonic, i.e. consistent with personal values and previous behavior. Some donors had already given blood or bone marrow, others had been involved in charitable organizations or had performed development aid in third world countries. Religion played a predominant role in 3 instances.

**Conclusion:** The majority of altruistic donors are motivated by their experience with renal insufficiency in their direct environment. They considered kidney donation as a natural act of loyalty to this patient group, consistent with their social behavior in other domains.

#### EO07 LIVING RELATED LIVER TRANSPLANTATION: A RESOURCE TO INCREASE THE DONOR POOL

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**Introduction:** Despite the increasing number of liver transplant performed every year in Italy, the number of patients waiting for liver transplantation continues to increase. Moreover while the overall rate of cadaveric donation is 21 donors per million per year there are areas of the country like Sicily where the rate of cadaveric donation is 8.3 donors per million per year. At our center in Sicily we have faced organ shortage with the development of a living related liver transplant program. We present our initial analysis of 53 cases of adult to adult living related liver transplantation (ALRLT) performed.

**Materials and Methods:** From January 2002 to September 2006, we performed 53 ALRLT. The donors all had genetic or emotional relationships; they were all ABO identical or compatible. Recipients suffered from cirrhosis secondary to viral etiology (18), HCC with viral cirrhosis (23), cystic fibrosis (2), primary biliary cirrhosis (2), HCC with non-viral cirrhosis (2), alcoholic cirrhosis (1), deficit OCT (1), cryptogenic cirrhosis (1), primary sclerosing cholangitis (1), biliary atresia (1) and metastatic carcinoid (1).

**Results:** There was neither donor mortality nor need of blood transfusion. Six recipients underwent retransplantation in four cases due to hepatic artery thrombosis, and two patients due to graft dysfunction.

**Conclusion:** During the period we transplanted these 53 ALRLT we performed 218 cadaveric liver transplants; 75 patients died awaiting transplant. In this series patient and graft survivals at 3 years were not different from our cadaveric liver transplant counterpart realized during the same period where three year actuarial patients and graft survival are 84.29% and 76.14%. In the last two years ALRLT represents a resource to face organ shortage and is a valuable option to decrease death and drop out from the waiting list.

#### EO08 PREGNANCY FOLLOWING RENAL TRANSPLANTATION: TWO ETHICAL APPROACHES

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**Background:** Pregnancy is recommended in renal transplant recipients with stable renal function, minimal proteinuria, well managed hypertension, without graft rejection and on maintenance levels of immunosuppression (IS). The op-

posite is associated with a risk for the graft function and the child. Ultimate decision for pregnancy nowadays is made by the patient after receiving appropriate information in contrast with historical group where the physicians decision was superior.

#### Patients characteristics

Historical group (HG) contains 45 pregnancies in 32 women from 244 women in fertile age after renal transplantation (RTx) between 1966 and 1997. Recent group (RG) contains 13 pregnancies in 10 women (146 women in fertile age, RTx 1997 – 2006). Women from RG were older, more often after RTx from live donor (RG 44%, HG 6,25%), 89% of RG were on CNI based IS (38% in HG).

**Results:** We reported 33% of miscarriages in RG (64% in HG), 66% of pregnancies led to the labor in RG (n= 9), 33% of hem ended with preterm delivery (HG: 36%, 40% resp.). 67% of Cesium deliveries were reported in RG (6/9). (HG: 81%, 13/16). 1woman developed acute cellular rejection 1 month after delivery in RG (HG = 0). We reported 8 newborns in RG, 2 of them with growth restriction (25%), 1 was a stillbirth (13%) (HG: 47%, 6% resp).

**Conclusions:** The results of pregnancies after RTx were similar despite of deliberation of baseline criteria. Pregnancies in last 10 years (RG) have a common figures: less miscarriages, higher amount of live donor graft recipients, bad outcome in patients with graft dysfunction, better newborns characteristic probably due to better management of hypertension. We continue in this approach to pregnancy after RTx.

## Education communication

### EO09 IMPROVEMENT OF DONOR IDENTIFICATION AND REFERRAL RATE AS A RESULT OF A UNIT BASED TIME STRATEGY

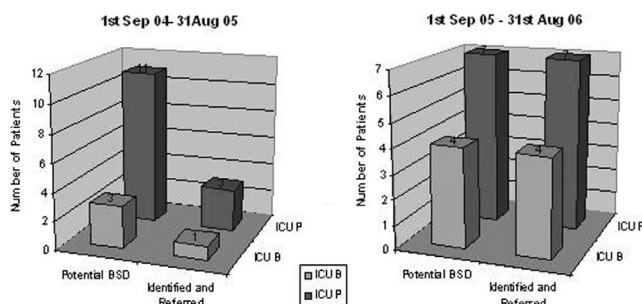
Andrew R. Broderick. *South West Donor Transplant Co-ordinators, Plymouth Hospitals NHS Trust, Plymouth, Devon, United Kingdom*

**Introduction:** Implementing the unit based time strategy will aid the donor co-ordinator in re-educating the ICU medical and nursing staff in donor identification and referral. This in turn will increase the number of organ donors.

**Methods:** The strategy was adapted from the role of the UK In House Co-ordinator. The Donor Co-ordinator(DTC) attended the ICU once each week and attended ward rounds, undertook education, completed the Potential Donor Audit (PDA), aided staff in the identification of potential donors, participated in approaching relatives for consent for donation and provided debrief sessions for staff involved in caring for organ donors. The strategy was piloted in two ICU's referred to as ICU P and ICU B.

Evaluation was by questionnaire and review of PDA data.

**Results:** Between 1<sup>st</sup> September 2004 and 31 August 2005 PDA data showed both ICU B and ICU P had failed to identify and refer most of the potential donors. In the 12 months following implementation of the strategy on 1<sup>st</sup> September 2005, ICU B had 4 patients likely to be BSD All 4 patients identified and referred. 2 families consented to donation. ICU P had 7 patients likely to be BSD. All 7 patients identified and referred. 5 families consented to donation. In both ICU's the questionnaire showed increased knowledge of donation each respondent knew how and when to contact the DTC and could identify a potential BSD patient.



**Discussion:** The strategy increased the knowledge of staff on both ICU's. This is reflected in the knowledge questionnaire and increased donor identification and referral from 36% on ICU P and 33% on ICU B to 100% on both units and increased family consent on each unit. In turn this has led to an increase in donor numbers.

### EO10 START OF TRANSPLANT COORDINATION PROGRAM IN RUSSIA – THE FIRST RESULTS

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**Background:** The condition of organ donation is unsatisfactory in Russia. Transition from the command form of public and professional life to the civil norms defines the tough PostSoviet public attitude to the postmortem donation. There are significant reduction in the number of transplantations, necessity to prove to the public and even medical staff operations saving life are lawful and doesn't trample on the rights of the deceased and their relatives. Rules and professionals forms are regulating the Russian program of transplantation have become outdated and are held down by old dogmas. In this situation transplantologists cant escape the conflicts with large medical and general public opinions. Such kind of conflict could be decided by accepting transplant coordination programm.

**Methods:** In March, 16, 2006 in Saint-Petersburg, first time in Russia, a stately conference of hospitals involved in organ donation, officials, lawyers, transplantologists, anesthesiologists and speakers from foreign transplant and coordination centers was held. This conference enacted extreme importance of creating Institute of Transplant Coordination for continuing Russian transplantation. At this meeting professional organization "Association of the Transplant Coordinators (ATC)", uniting specialists of different profiles which involved in organ donation process was created. In Saint-Petersburg was undertaken managerial procedure by Health Department of local Government for creating official financing this new service.

**Prospectives:** The main aim of ATC is creating educational instruments for medical staff who will take a part in transplant coordination and creating acceptable forms of organization of the organ donation. The main accents in future activities of ATC will be creating permanently acting school of transplant coordinators with certification of participants, establishing wide contacts with mass-media and educational institutes, making corresponding rules in the field of the organ donation professionally. The first results of these efforts are shown in the table 1 and 2.

Table 1. The indices of organ donation activity in 2005 - 2006 in Saint-Petersburg

Profiles	2005	2006
Effective donors	17	32
Brain death donors	6	15
Donors after cardiac death	11	17

Table 2. Transplants was obtained in 2005-2006 in Saint-Peterburg

profiles	2005	2006
Kidneys	34	64
Livers	0	7
Pancreas, lungs	0	1

### EO11 UNIVERSITY COURSE ON ORGAN DONATION AND ORGAN TRANSPLANTATION

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**Introduction:** Since 2005 Sweden has a new law stating, that every hospital in Sweden with organ donor activity, should have a physician and a special nurse in the ICU responsible for organ donation. For that reason Uppsala University together with OFO Central Sweden started a University class for specially educated nurses working in ICU, anesthesiology and OR involved in organ donation and organ transplantation. By offering this course there is an opportunity for nurses to increase their competence in organ donation and transplantation.

**Method:** The course was planed as a part time course with 2 working days about every 4<sup>th</sup> week - total of 16 occations. The course fee was 12 000 SEK and the participants were recruited from the whole country. ICU was represented by 11 participants, anesthesiology and OR by 3 and one from transplantation ward.

**Programme:** 1) Overview of transplantation of solid organs including patient selection, surgical procedures and transplantation results.

2) Donor selection, diagnosis of brain death and donor maintenance. In this section simulation training was included.

3) Information and caring of family during and after organ donation.

4) About 1/4 of the course was dedicated to ethical, religions, moral and legal aspects of organ donation.

5) The participants were allowed to meet donor family members as well transplanted patients.

Examination was performed by an individual written examination. Course evaluation was made using a questionnaire regarding course administration, management, examination, teacher performance and practical exercises. The judgments were made in an graded scale from 1- 5 points.

**Results:** Administration 4.5, management 4.4, examination 3.8, teaching 3.1-4.8, practical exercise 4.9. Total evaluation: 4.2

**Conclusions:** Overall impression was that this course gave the participants a good basic knowledge of the field, giving the participants confidence in their future work in organ donation.

## EO12 FAMILY REFUSAL CAUSES DISCREPANCY BETWEEN POTENTIAL AND UTILIZED DONORS: A PROSPECTIVE STUDY

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**Background:** The growing number of patients waiting for organ transplantation requires optimal use of potential organ donors. Since the Dutch Organ Donation Act was introduced in 1998 the number of organ donors has not increased. A prospective pilot study was initiated to study the effect that supportive facilities on organ donation in the hospital organization.

**Methods:** The study began with a chart analysis of all in-hospital deaths in 2003 that occurred in 6 hospitals. Supportive measures to increase the number of donors (a call center and specially trained requestors) were then implemented for one calendar year (2004). Chart analysis was continued for one year after these measures were terminated (2005). All data were analyzed to study the effect of the supportive program on the detection and realization of potential organ donors.

**Results:** In the studied period 10,596 patients died in the participating hospitals and 2,581 (24%) of these patients died in the ICU.

A total number of 239 potential organ donors were found where 219 (92%) were identified ( $p=0.014$  comparing 2003 with 2004). In 2005 the number of unrecognized potential organ donors increased (n.s.,  $p=0.081$ ). Organ donation was discussed with the relatives of 176 deceased patients, resulted in 79 donor referrals.

Due to the low frequency of introducing a requestor (36%) to discuss donations with the relatives during the process to consent, no significant differences were found ( $p=0.305$ ).

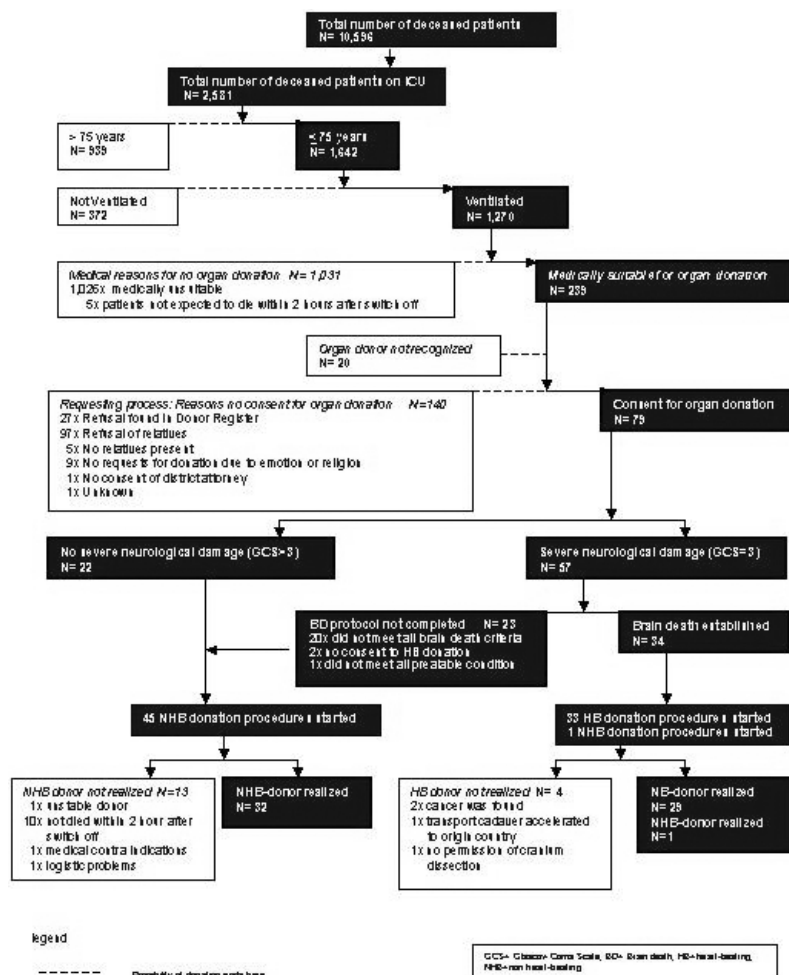
**Conclusions:** Potential organ donors are adequately identified on intensive care units in participating hospitals. Family refusal and medical unsuitability are the most important reasons why donations do not take place. Additional supportive measures such as, a call center and special trained requestors do not reduce the discrepancy between the potential and utilized donors.

## EO13 DECREASE IN REFUSALS TO DONATE IN SPITE OF A LACK OF CHANGE IN THE ATTITUDE OF THE GENERAL POPULATION TOWARDS ORGAN DONATION: A CALL TO REVIEW THE FACTORS INFLUENCING REFUSALS

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One of the critical points in the process of organ donation is refusal to donate. A progressive decline in the rate of refusals to donate (estimated over number of approaches) has been observed in Spain, from 25% in 1993 to 15.2% in 2006. We aimed to evaluate whether a change in the attitude of the population towards donation had occurred, as a way to justify the decrease in the rate of refusals.

A survey was performed to a representative sample of the general population in Spain at three different time points, in 1993, 1999 and 2006, people



Abstract EO13 – Fig. 1. Overview of all ICU deaths occurring in 2003–2005.

surveyed being 1,288, 990 and 1,126 respectively. To analyse the attitudes of the population towards donation/transplantation, the questionnaire and the survey's methodology used were mostly the same.

The demographic and socio-economic characteristics of the represented population changed along the studied period.

Regarding the information on donation/transplantation, 58.3% of people considered it was insufficient in 1993. This rate decreased to 48% in 1999, but increased again to 57.1% in 2006 ( $p < 0.001$ ). On the contrary, there was a significant increase in the percentage of people who knew someone who had needed a transplant (14.2% in 1999 *versus* 20.9% in 2005;  $p < 0.05$ ).

Outstandingly, no significant changes were observed regarding the attitudes of the population towards donation, as represented in the table.

Attitudes of the population towards donation

Year of Survey	1993	1999	2006
Donor card	6.1%	7.9%	8.2%
Inclined to become a donor	58.4%	56%	58.3%
Not inclined to become a donor	17.6%	15.5%	14.7%
Does not know/ No answer	17.9%	20.6%	18.7%

**Conclusions:** Although the indirect contact with donation/transplantation seemed to increase, no change was noticed with regards to the attitude of the population towards donation. The decrease in refusals in spite of this lack of change outlines the fact that other variables, mainly the way the family is approached, may have a higher importance in the decision to donate.

#### EO14 EFFICACY IN TRAINING MEDICAL STUDENTS TO INCREASE TISSUE DONATION

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**Introduction:** In most medical schools there is a lack of training about the process of organ and tissue donation. This situation could result in future difficulties to recognize potential donors and approach families. In 2002 we started a yearly training course offered as optional credits (4.5 credits) in the course syllabus of the faculty. After the course some students applied for scholarships at our service. The aim of this work is to describe the educational activities and the impact of training in donation activities.

**Material and Methods:** The optional course has 25 hours of theoretical training in the process of organ and tissue donation and 20 hours of practical activities developed at our service. 150 students have been trained, 24 of them have applied for the grants and has been working as a permanent staff of 7 students for a minimum of one year. Their task includes active detection and screening of all potential tissue donors, collaboration in family request, donor evaluation and blood samples extraction and permanent collaboration with the medical transplant coordinator on duty.

**Results:** We observed a continuous increase in the detection of potential tissue donors from a 10% to a 97% ( $p < 0.005$ ) between 2000 to 2006 activity with a consequent increase in the number of real tissue donors from 82 to 286 ( $p < 0.005$ ). They also participated in about 15% of the family request especially for cornea donation and in about 85% of blood samples extraction.

**Conclusion:** The training of medical students has showed an efficacious way to improve tissue donor numbers and an exceptional tool for the work of transplant coordinators. At the same time, their clinical practice has allowed them to develop abilities to work under pressure inside a hospital environment and learn stress management and bad news communication.

## Practical aspects of coordination

#### EO15 EXPERIENCES AFTER ONE YEAR WITH A NEW ORGANIZATION FOR FACILITATING ORGAN DONATION IN A SWEDISH REGION

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Despite a general public acceptance of donation and transplantation, the donation rate from deceased donors in Sweden is quite low. In an attempt to improve this rate in the Swedish Västra Götaland region (1.65 million inhabitants), we have implemented a new organization starting from January 1, 2006. The transplant coordinator on call was assigned a more active role to function as an on-site resource regarding different aspects of the donation process, including contact with the relatives and the pre- and peroperative management of the donor. This was accomplished in close and sensible cooperation with doctors and nurses at the respective donor hospital, in order to meet the local

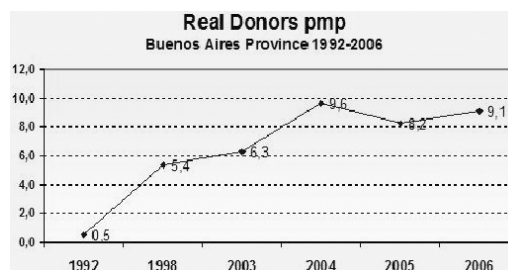
needs. To date (Dec 31, 2006) the donation rate has reached 17.6 per million population, as compared to 13.9 for 2005. Although the coordinators' active working time per donor has become longer, the total time from first contact to completed donation has shortened. A questionnaire was sent to all involved teams and the comments were almost exclusively positive and encouraging. Interestingly, no family expressed veto to donation during this period. In several cases the coordinators have been able to inform and support the relatives also after the procurement operation.

#### EO16 HOSPITAL PROCUREMENT SERVICES AND REGIONAL COORDINATION - NEXT STEPS IN BUENOS AIRES PROVINCE PROCUREMENT MODEL

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**Purposes:** 1) To support the development of procurement activity as an own process in hospitals with powerful critical services: Intensive Care Units (ICU), and Neurosurgery. 2) To increase regional brain death's and potential donor's detection and the number of real donors by means of monitoring and giving support to all the donation processes in smaller centers of the area.

**Background:** In 1992 Cucaiba started the procurement activity in Buenos Aires Province as an external team increasing the real donors from 0.5 to 6.3 donors p.m.p. in 2003. In 1996 started a Programme with in-house medical coordinators in a few hospitals with ICU and Neurosurgery. In 2004 this programme was extended to the whole province raising the number of donors to 9.6 donors p.m.p. In the period 2004-2006 the increment shape became plane.



**Conclusions:** having in mind the results of higher hospital staff's participation through the figure of the Transplant Coordinator, we consider that this is the best way to reduce the main reasons of donor's lost: no detection or delay in brain death diagnosis, inadequate donor's maintenance, inadequate selection, and refusal to donation. The creation of Procurement Services with better technical and human resources in the highest hospitals will ensure the fulfillment of all steps in procurement process like a common hospital activity changing the staff's attitudes toward donation. Additionally, these Services could make the monitoring and support of brain death detection and diagnosis, performing the donation processes in smaller hospitals in the surrounding influence area.

#### EO17 THE STANDPOINT OF THE TEENAGERS ABOUT DONATION AND TRANSPLANT PROCESS, A TEACHING PROJECT IN BARCELONA

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**Objective:** The aim of the study was to ascertain the level of awareness of donation and transplant among teenagers, analysing their standpoint and perceptions.

**Material and methods:** Descriptive-prospective study. Pre and post-class 12 questions -survey. The Transplant co-ordination team gives informative classes in secondary schools, 2005-06/2006-07.

**Results:** Surveys: 713 pre/581 post-class. 98% had some prior knowledge and 68% knowledge about the entire process of donation and transplant. Mass-media in 53%, is the usual information channel.

Regarding own donation, 67% had doubts and 10% refused it. For relatives', 55% had doubts and flat refusals increased to 25%. Related to transparency and parity of the health system, they are extremely critical: 26% believed equality does not exist and 60% have doubts. For 85% this inequality is worse abroad. 64% are convinced that organ trafficking exists and 26% assume it is possible.

Following classes, figures improve slightly. The students claim higher awareness (87%) and 62% express greater interest. Generally they maintain their standpoint about donation: 12% flat refusals and 23% with doubts. 45% accepted these classes could be helpful to make decisions and 60% had reconsidered their previous attitude. Related to equality, 26% maintain doubts and 15%

are convinced it doesn't exist. On trafficking: 72% assume it's possible, 13% exclusively abroad.

**Conclusions:** Knowledge about donation and transplant is slanted, due to information sources (usually mass media) and a warped (TV-dominated) perception of the health system's transparency and equality.

A considerable number of students refuse donation or still maintain their doubts, despite a decrease following the classes. Moreover, the number of students insisting that donation should not be obligatory and has to be considered an act of altruism remains a divisive issue.

### EO18 SOCIAL WORKERS' NEW CHALLENGES AT THE APPROACHING OF POTENTIAL TISSUE AND ORGAN DONORS' FAMILIES IN A PUBLIC UNIVERSITY HOSPITAL

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**Introduction:** The social assistance at the university hospital offers support direct assistance to the patients in ward care and their families guaranteeing free access to information of the institutional routine at the internship process to the civil rights.

**Aim:** To quantify this approach joined to the potential donors' families.

**Methods:** From April to December 2006 social workers were included in the tissue and organ procurement program we used them for: a) welcoming potentially brain death patients' family b) explaining the donation's opportunity c) help the people after the family's consent, the donor authorization term is filled out d) improve the interface with the organ procurement organization e) Give support and orientation to the families f) Promote periodic meeting with multidisciplinary team to evaluate quality markers.

**Results:** We studied 141 potential donor's families. Consented tissue donation was 22%, only 3% consented in organ donation and 59% refuse any donation and 16% depended on the decision of the other family members. We observed that there was increased in notification rate, organ donation rate and effective multiple organ donation.

**Conclusion:** We observed at the running time an effective sensitiveness at the familiar approach. Therefore a significant raising on the tissue and organ have been observed.

### EO19 ARE THE HEMODIALYSIS HEALTH STAFF CANALISE THEIR PATIENT'S TO THE TRANSPLANTATION IN TURKEY?

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The organ shortage is a big problem for Turkey, deceased donor procurement rate is 2,1 pmp. But we solve this problem in Antalya and Izmir, deceased donor procurement rate were 20 pmp, 17,2 pmp in 2005 respectively. And most important part of these cities, these are performing 60% of kidney transplantation with 20% of all population in Turkey. We realized that there is a second problem at this point. Are the physicians canalise the end stage renal disease patients to the transplant centers ?

In this study we analyzed the attitude of hemodialysis health staff on transplantation in Antalya and Izmir. 88 health staff were studied at this study. We are here reporting a standard questionnaire comprising 23 items which address specific demographic, experience and attitude of transplantation parameters. The overall mean age was 38.53 years; males constituting 59.1% and 45 staff of 88 staff were from Izmir. 78,4% of them were medical doctors. The overall only 65% of them canalise the all patients and 76,1% of them know how to contact with transplatation centers. 77,3% of them know the number of dialysis patients and 45,5% of them know number of kidney transplantations in Turkey. Only 36,4% of them know kidney transplatation's contrendications. 100% of them would like to transplant if they will be a dialysis patient.

Only the staff who are working in Antalya canalise the patients to the transplant center more than Izmir. (p=0,008) There is not any other significant result between to cities.

The main problem at the transplantation is organ shortage and the second one is canalise the patients to the transplant centers. Therefore we have to educate physicians at the dialysis.

### EO20 WHAT DONOR FAMILIES CAN TEACH US ABOUT OBTAINING CONSENT: DONOR FAMILY VIDEO INTERVIEW PROJECT

Lisa J. Dinhofer. *Thanatology, Hood College, Frederick, MD, USA*

**Purpose:** This presentation highlights video clips and educational components of a video interview project investigating: the experience, decision-making factors, coping mechanisms and out-comes in electing organ and tissue donation subsequent to homicide, suicide, pediatric death and multiple simultaneous loss within one family; understanding the impact of death notification on consent; perceptions of brain death and decision-making; the transformative power of donation on traumatic death during and after consent; the psychological/spiritual perceptions of a living host for an anatomical gift; presumed consent vs. an opt-in election.

**Methods/Materials:** Individually videotaped interviews of Caucasian and African American organ and tissue donor families who had experienced traumatic loss through a U.S. organ procurement organization. Participating families voluntarily consented verbally and in writing regarding the purpose, scope and educational intent of the project. Interviews averaged 90 minutes in length and were edited to accompany didactic educational training curriculums for state conferences, Requestors, Hospital Development and Aftercare staff, community healthcare professionals and college students. Individual family anonymity was maintained until after the project was completed when a reception was held for a screening and group discussion.

**Results:** Participating families highlighted much needed information regarding how to work with them from the initial notification of crisis, to consent through to bereavement, and confirmed the option of donation as a powerful coping mechanism and transformative tool for dealing with traumatic and unexpected loss.

**Conclusion:** The project has been successful in highlighting donor family needs and converting negative bias, misinformation and stereotyping about donation; caring for families experiencing traumatic loss and the impact that care has on the decision-making process and outcomes. Feedback from professional and lay viewers in various educational settings has been overwhelmingly positive and educational.