

Renal Transplantation on Balkan Peninsula

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Introduction

During the past 15 years the region of Balkan Peninsula suffered by many disasters including the terrible and brutal civil wars, the violence of humanity and destroying of the countries and creation of new independent states. The changing of political systems in some of the Balkan countries has changed also the policy of the whole renal replacement therapy. Romania, Bulgaria and Albania have dramatically improved the quantity and quality of RRT. Renal transplantation, as a final step of RRT has great importance especially in our region not only as a quality clinical practice and full rehabilitation of the patients but also from economical point of view. The dialysis remains the most expensive treatment and unfortunately in the most of the Balkan countries it is still predominant way of treatment.

The aim of our presentation is to point out some important questions about the renal transplantation in the region in the function to improve future collaboration among the future (desperately we hope!) members of European Union

Methods

In terms of the obtaining the valid data from the cities with some of the transplant activities (BANTAO cities predominantly) the usual questionnaire was sent to responsible persons (if they exist), friends (they exist always) and colleagues. The questionnaire was not too much detailed but could give us an impression especially in the regions in which the transplant activity is until now

practically unknown (Pristine, Tirana). In the same time we used any published official data (EDTA-ERA Annual Report 2003) and recent publications from the well known journals. The incidence of renal transplantation and prevalence of the transplant patients, the percentage of the whole RRT, the immunosuppressive protocols were analysed. Special attention was done on the problem of Living Donor Transplantation which is predominant practice nowadays in the whole region in terms of the use of expanded criteria donors (marginal, elderly, unrelated, ABO incompatible, cross match positive...) as well as a new surgical technique as laparoscopic nephrectomy). Some of the data were compared with the Euro Transplant data (Annual Report 2004) which as a community (The countries Benelux, Germany, Austria and Slovenia- about 120.000.000 citizens) is similar to the Balkan region (112.000.000, with Turkey).

Results and discussion

About 24 cities over the Balkan region perform or follow the renal transplant patients as a part of RRT: Athens, Adana, Ankara, Antalya, Belgrade, Bucharest, Bursa, Cluj-Napoca, Eskisehir, Istanbul, Izmir, Kayseri, Novi Sad, Patras, Samsun, Skopje, Sofia, Targu Mures, Thessalonica, Timisoara, Varna. (1,2,3) Two centers, Prishtina and Tirana for the time being only follow the patients transplanted elsewhere. As far as we know the colleagues in Tirana are ready to start renal transplantation this autumn and we wish good luck to them.

Table 1: The prevalence of renal transplant patients (2003-2004)

Balkan centers	Total number	pmp	LD	KD	Percentage of Established RRT
Belgrade-SCG	393	48.75	267	86	14.7 %
Istanbul- TR	3667	51.6	2727	940	12.5 %
Athens- GR	1934	193	856	886	18 %
Tirana -AL	78	22	76	2	>50%*
Skopje- MKD	116	55	110	6	9.4 %
Prishtina- Kos(SCG)	33	16.5	21	12	16.5 %
Bucharest-ROM	1050	47.7	900	150	20 %
Sofia (BUL)					
Total	6299	56.24	4957	2082	15.5 %

* Total number of ESRD pts very low.

According to the data presented in EDTA-ERA Annual Report 2003, the total prevalent number of transplant patients in developed western countries is between 300-400 pmp while percentage of established RRT is about 45%. As

it is shown on the Table 1, Living Donor renal transplantation is still predominant among the Balkan countries. In comparison with the European data this difference is highly significant.

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Table 2: Transplantations performed in Balkan countries (2003)

Countries	Total number	pmp	LD	KD
SCG	50	6.25	40	10
Greece	229	22.9	88	141
Turkey	546	7.8	406	140
Bulgaria	55	6.8	?	?
Romania	176	8.0	158	18
Rep of Macedonia	20	10	20	0
Total	1076	9.6	712	309
Euro-transplant	3998	33.3	646	3352

The data of Euro-transplant 2003 Annual Report (4) clearly showed the difference between the Balkan Countries and the members of Euro-transplant (Austria, Benelux, Slovenia, Germany) not only in the number of performed transplantations but also in the ratio between living donor and cadaver transplants. The orientation of the Balkan

cities to living donor transplantation is understandable bearing in mind the recent events in the region and the lack of any cooperation and organ sharing among them. In some Balkan cities the living renal transplantation is fully developed accepting practically every potential donor available which is shown on the Table 3.

Table 3: Expanded criteria living donor transplantation

	SCG	MKD	GR	TR	ROM
Marginal donors	+	+	-	+	-
Elderly donors	+	+	+	+	+/-
Unrelated donors	+/-	+	-	+	-
ABO inc. donors	-	+	+	-	-
Cross match poz	+	-	-	-	-

+ accepted
 - not accepted
 +/- sporadic

In terms of the immunosuppression used in different Balkan cities it can be conclude that the most used maintenance protocol is triple drug therapy consisting Prdnizolon, MMF and CyA or Tacrolimus. The use of Azathioprin is very rare and sporadic. In some of the cities Tacrolimus and Sirolimus are not available (Skopje, Tirana and Prishtina). ATG and/or monoclonals induction therapy is present in most of the centers. There is no real policy in the use of induction therapy among the Balkan cities and it depends of the local staff and experience.

Conclusion

Analyzing the data presented we can concluded that the transplant activity in the Balkan cities is far from sufficient. Some centers are really near the best European practice and standards (Greek centers), some of them are still fully undeveloped (Tirana, Prishtina, Sofia?). Living Donor transplantation is predominant (mostly double) in comparison with cadaver. From the other side, the Balkan cities are closed among them and the region is practically ideal for organ sharing. Creation of an appropriate

association as BALKAN TRANSPLANT could be probably best way to reach European standards.

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