The Transplantation Donation Process in the Centro de Investigaciones Medico Quirurgicas of Cuba: 1999–2002

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ABSTRACT

Objective. In 1998 in the Centro de Investigaciones Medico Quirurgicas the Transplant Coordination Office (TCO) was created, with the aim to organize a system to support a hepatic transplantation program. This organization, which changed the transplantation-donation process not only in our center but in the whole country, is described in this article.

Method. The files of donors generated in our hospital were studied together with the transplant coordination records, from 1999 till the first half of 2002.

Results. In the period studied, 21 potential donors were diagnosed with brain death, yielding a donation rate of 71.4%. Brain death was most frequently caused by vascular brain disease; however, in the realized donor group, the cranioencephalic trauma predominated. The typical donor was a man of average age 39.2 years (range, 18–86 years). Among the potential donors, 24% were excluded based on medical criteria, and 5% due to family objections. Forty liver transplantation were performed in 36 patients including 1 liver-kidney simultaneous procedure. The principal etiologies for transplant included hepatitis C virus cirrhosis, 22%; alcoholic, 19%; and acute hepatic failure, 13%. Kidney transplantations were performed in 70 patients, including 41 from cadaveric donors (53.6%) and 29 from living related donors (41.4%). In 2001, a pancreas-kidney transplantation program was started.

Conclusion. The creation of the TCO has been of paramount importance to optimize transplantation program functions.

IN 1998 in the Centro de Investigaciones Medico Quirurgicas (CIMEQ), a Transplant Coordination Office (TCO) was created, with the aim to organize a system to support a hepatic transplantation program, which at that time had been discontinued in the country for more than 8 years. These 2 facts, the creation of the TCO, and the initiation of an hepatic transplantation program, in our own institution, changed the transplantation-donation process, not only in our center, but also in the whole country.

The ongoing kidney and corneal transplantation programs were already increasing in numbers. Two years after the hepatic program, a pancreas-kidney transplantation program was started, also in our institution. This article describes the TCO and the results of transplantation groups in our center.

METHOD

The files of realized donors generated in our hospital, as well as the TCO records from 1999 until the first half of 2002 were studied.

RESULTS

Twenty-one potential donors were diagnosed based on brain death, which yielded 15 actual donors (71.4%). In 2000, there were 3 actual donors; 9 in 2001; and 3 in the first half of 2002. The most frequent cause of brain death was

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vascular disease; however, among the actual donor group, head trauma predominated. The typical donor was a man of average age 39.2 years (range, 18–86 years). Among the potential donors 24% were excluded for medical reasons, and 5% due to lack of family consent. The retrieval team performed 47 procedures, 81% of which were multi organ harvests.

Forty liver transplantations have been performed in 36 patients, including 1 simultaneous liver-kidney procedure. The principal causes, which have lead to transplantation were hepatitis C virus cirrhosis (HCV), 9 patients (22%); alcoholic, 8 patients (19%); and acute hepatic failure (AHF), 5 patients (13%). In 1999, 5 liver transplantations were done; 9 in 2000; 14 in 2001; and 11 in the first half of 2002.

Kidney transplantations were performed in 70 patients: 9 in 1999; 22 in 2000; 26 in 2001; and 13 in 2002. Among these procedures 7, 41 were from cadaveric (53.6%) and 29 from living related donors (41.4%).

In 2001, a pancreas-kidney transplantation program was started, with 4 procedures to date.

DISCUSSION

Using the Spanish model of transplantation donations, an intrahospital TCO was organized, which has in the beginning acted as a national coordination activity for the initiation of a hepatic transplantation program.[1] In our hospital, the previous activity for detection of possible donors and their conversion to real donors were practically none; from 0 to 1 actual donors per year.

With the use of part-time doctors dedicated to the active search for possible donors and participation in its care, after the diagnosis of brain death and implementation of training courses for medical and paramedical personnel, the number of actual donors generated in our hospital has increased. This program reduced the cold ischemia time for the organs to be transplanted, and decreased the long-distance travel expenses.

The most frequent cause of brain death in actual donors was the cranioencephalic trauma, with an average age of 39.2 years, results that are akin to those of the Spanish programs at their beginning.[1]

Referring to the sicknesses that necessitate liver transplantation, HCV and the alcoholism were the main causes, similar to the experience of the majority of world teams.[2,3] However, 13% of transplantation were performed for AHF, probably due to our center being the only one in the country that does this type of transplantation.

The kidney transplantation program has been growing due to the increase in cadaveric donor detection and the use of living donors, a method that is used by most teams in the world to address the increasing number of patients on waiting lists compared with the number of actual donors.[4,5] Our hospital has procured more kidneys from living donors in our country.

Using the above methods, we seek to further increase the yearly transplantation number and also include other programs. In conclusion, the creation of the TCO has been of paramount importance to optimize transplantation program functions.

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