EDITORIAL

Allocation and Distribution of Kidney, Pancreas and Liver

Indra Kiran Masammatikarajulu*

Department of Gastroenterology, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India

ABSTRACT

Kidney Allocation System (KAS) is the process of matching organ donors with functional kidneys to patients in need of these organs. This system is governed by national networks that evaluate, match, and transplant organs from donors to recipients.

KAS was created in response to higher-than-necessary kidney discard rates, variability in access to transplants for candidates who are more difficult to match due to biologic reasons, inequities caused by how waiting time was calculated, and a matching system that results in unrealized life years and high re-transplant rates. The parts of KAS addressing transplant candidate priority, including EPTS, and assessing donor longevity prospects, including KDPI, will not change as a result of kidney distribution regulations.

The pancreas allocation policy provided OPOs with numerous options for pancreas allocation practice. They might provide kidney-pancreas candidates organs based on the KP match run, the kidney alone match run or a mix of match runs.

When a possible liver donor's information is uploaded into the computerized OPTN matching system, the computer eliminates any patients who are not a match due to blood type, body size, or other medical considerations.

INTRODUCTION

Restraint stress has been shown to cause oxidative damage in tissues. Several studies have found that Curcumin (CUR) can help protect against oxidative stress. The purpose of this study was to look at the effects of CUR on restraint stress-induced oxidative stress damage in the brain, liver, and kidneys. To assess the changes in oxidative stress parameters after restraint stress, the levels of Malondialdehyde (MDA), reduced Glutathione (GSH) and antioxidant enzyme activities Superoxide Dismutase (SOD), Glutathione Peroxidase (GPx), Glutathione Reductase (GR), and Catalase (CAT) were measured in the brain, liver, and kidney of rats [1].

PANCREAS TRANSPLANTATION

As islet transplantation becomes more common in clinical practise, its coexistence with vascularized pancreas transplantation necessitates a rethinking of donor selection and allocation issues. In order to resolve these problems, one must weigh the short-term morbidity of pancreatic transplantation against the long-term attrition of islet grafts. The allocation of pancreases from obese and older donors for islet isolation has been predicated on their connection with poorer pancreas transplant outcomes and higher islet yields. In this overview, we demonstrate that transplanted islet mass does not always correspond with graft function and argue that donor selection criteria for islet transplantation, and thus allocation procedures, may need to be revised [2].

Received 03-Aug-2022 Manuscript No IPP-22-14808 **Editor Assigned** 05-Aug-2022 PreQC No IPP-22-14808(PQ) **Reviewed** 15-Aug-2022 QC No IPP-22-14808 **Revised** 29-Aug-2022 Manuscript No IPP-22-14808(R) **Published** 02-Sept-2022 DOI 10.35841/1590-8577-23.8.763

Keywords Pancreas; Pancreatitis; Pancreatic cancer; Kidney; Liver
Correspondence Indra Kiran Masammatikarajulu
Department of Gastroenterology
Post Graduate Institute of Medical Education and Research (PGIMER)
Chandigarh, India
E-mail dr.indrakiran.masamma@gmail.com

LIVER TRANSPLANTATION

For more about a decade, liver allograft allocation has been a source of contention. The Liver and Intestinal Transplant Committee have suggested new redistricting adjustments to the present United Network for Organ Sharing (UNOS) liver allocation strategy. This new plan is based on the old one, with the goal of distributing organs in a fair, efficient, and equitable manner. We intend to explore in depth at the redistribution suggestions thus far, their merits, and how they may aid patients who do not have adequate access to livers in this review. The suggested organ distribution adjustments to address geographic disparities in access to liver transplantation The purpose of this article is to present the most recent studies as well as proposed adjustments to the current distribution system. We will also discuss two more alternative strategies for redesigning distribution utilizing concentric circles and neighborhoods. This essay also examines the economics of the redistricting idea and its implications for transplant centers [3].

Alcoholic liver disease, hepatocellular cancer, and viral hepatitis are the most common reasons for a liver

Citation: Masammatikarajulu IK. Allocation and distribution of kidney, pancreas and liver. JOP. J Pancreas. (2022) 23:763.

transplant. Livers are first allocated internationally to patients with a high priority status or those with an approved combined organ status, and then on a national level, where allocation is recipient-driven or center-driven, depending on country-specific rules [4].

Due to the growing number of patients in need of a liver transplant, new and improved allocation policies that prioritize patients for liver transplants are required. Policy should provide equitable allocation that is replicable and significantly predictive of the best pre and post-transplant outcomes while taking the natural history of the potential recipient's liver disease and its complications into account. There is widespread support for prioritization strategies that prioritizes the sickest patients on the waiting list with the highest risk of mortality. In urgency-based prioritization, the model for end-stage liver disease and the Child-Turcotte-Pugh score system, the two most universally applicable systems, are employed. Other aspects, however, must be considered in order to obtain optimal allocation. Factors influencing pre-transplant patient survival and donor organ quality also have an impact on outcome. The ideal approach would include allocation prioritizing that takes both urgency and transplant outcome into account. We examined past and present liver allocation schemes in order to spark additional conversation about how to enhance current rules [5].

CONCLUSION

The increased expenses of transportation and transplantation may balance the increased costs of the healthcare system in caring for patients with advanced stages of liver disease. As modeled by all proposed methods thus far, the current allocation boundaries are not optimal for liver distribution. It is critical to identify a more optimal and equitable allocation/distribution scheme. Patients were delisted because they were no longer transplant candidates. Adult patient survival after transplantation after one year and five years of risk adjustment were increased.

References

1. Samarghandian S, Azimi-Nezhad M, Farkhondeh T, Samini F. Anti-oxidative effects of curcumin on immobilization-induced oxidative stress in rat brain, liver and kidney. Biomed Pharmacother. 2017;87:223-229. [PMID: 28061405].

2. Berney T, Johnson PVR. Donor pancreata: Evolving approaches to organ allocation for whole pancreas versus islet transplantation. Transplantation. 2010;90:238-243. [PMID: 20463635].

3. Deshpande R, Hirose R, Mulligan D. Liver allocation and distribution: time for a change. Curr Opin Organ Transplant. 2017;22:162-168. [PMID: 20463635].

4. Jochmans I, van Rosmalen M, Pirenne J, Samuel U. Adult liver allocation in eurotransplant. Transplantation. 2017;101:1542-1550. [PMID: 28060242].

5. Schilsky ML, Moini M. Advances in liver transplantation allocation systems. World J Gastroenterol. 2016;22:2922-2930. [PMID: 26973389].

Citation: Masammatikarajulu IK. Allocation and distribution of kidney, pancreas and liver. JOP. J Pancreas. (2022) 23:763.