

Long-Term Functional Recovery, Quality of Life, and Pregnancy After Solid Organ Transplantation



Swati Rao, MD^a, Mythili Ghanta, MD^b, Michael J. Moritz, MD^{c,d,e},
Serban Constantinescu, MD, PhD^{e,f,*}

KEYWORDS

- Kidney transplantation • Liver transplantation • Pregnancy • Quality of life
- Functional recovery

KEY POINTS

- Successful transplantation results in improved functional status, health-related quality of life (HR-QOL), and reproductive health in kidney and liver recipients. However, functional status and HR-QOL of recipients remain lower than in the general population.
- Functional status and HR-QOL are associated with patient and graft survival. Multiple factors, such as comorbidities, perioperative course, graft function, immunosuppressive medications, and patient demographics, impact HR-QOL.
- Fertility is restored soon after successful transplant. Appropriate birth control and pregnancy counseling is warranted. Transplant recipients should wait at least 1 to 2 years after transplantation before conceiving.
- Most pregnancies in kidney and liver recipients have successful maternal and newborn outcomes. These pregnancies are high risk, with increased incidences of hypertension, preeclampsia, and prematurity.

Continued

Disclosure Statement: The National Transplantation Pregnancy Registry is supported by grants from Astellas Pharma US, Pfizer, and Bristol-Myers Squibb Company.

^a Section of Nephrology, Hypertension and Kidney Transplantation, Temple University School of Medicine, 3440 North Broad Street, Kresge West, Suite 100, Philadelphia, PA 19140, USA;

^b Pancreas Transplant Program, Section of Nephrology, Hypertension and Kidney Transplantation, Temple University School of Medicine, 3440 North Broad Street, Kresge West, Suite 100, Philadelphia, PA 19140, USA;

^c Transplant Services, Lehigh Valley Health Network, Allentown, PA 18103, USA; ^d Morsani College of Medicine, University of South Florida, Tampa, FL 33612, USA;

^e National Transplantation Pregnancy Registry, Gift of Life Institute, 401 North 3rd Street, Philadelphia, PA 19123, USA; ^f Kidney Transplant Program, Section of Nephrology, Hypertension

and Kidney Transplantation, Temple University School of Medicine, 3440 North Broad Street, Kresge West, Suite 100, Philadelphia, PA 19140, USA

* Corresponding author. Section of Nephrology, Hypertension and Kidney Transplantation, Temple University School of Medicine, 3440 North Broad Street, Kresge West, Suite 100, Philadelphia, PA 19140.

E-mail address: serban.constantinescu@tuhs.temple.edu

Med Clin N Am 100 (2016) 613–629

<http://dx.doi.org/10.1016/j.mcna.2016.01.010>

[medical.theclinics.com](http://www.medical.theclinics.com)

0025-7125/16\$ – see front matter © 2016 Elsevier Inc. All rights reserved.

Continued

- The incidence of birth defects is similar to the general population, except for pregnancies exposed to mycophenolic acid products. These pregnancies are associated with higher incidences of miscarriages and birth defects, including a specific pattern of birth defects in the offspring.

INTRODUCTION

Improved health after transplantation enables kidney and liver recipients to resume many personal and social functions with an enhanced sense of well-being. Along with data on patient and allograft survival, analyses of functional recovery, health-related quality of life (HR-QOL), and pregnancy outcomes can better define the success of transplantation.^{1,2}

Sexuality and fertility are adversely affected by chronic organ failure. Successful transplantation improves reproductive function. The first pregnancy after kidney transplantation occurred in 1958 and after liver transplantation in 1977.^{3,4} Since then, thousands of successful posttransplant pregnancies have been reported.^{5,6} Reproductive health and the opportunity for parenthood can have a major impact on overall QOL for recipients. It is estimated that as of June 2013, there were 200,000 recipients alive with a functioning kidney transplant and 65,000 recipients alive with a functioning liver transplant.^{1,2} Approximately 25% of these recipients are women of reproductive age.^{5,6}

Internists and family physicians play a key role in providing essential preventive care, management of comorbidities, and long-term care to this patient population. This article focuses on salient features of functional recovery, HR-QOL, and reproductive health after kidney or liver transplantation.

FUNCTIONAL RECOVERY

Functional recovery after transplantation includes improvements in cognition, physical function, and employment potential.

Cognitive Function

The positive impact of transplantation on cognitive function is an important measure of patient recovery. Pretransplant hepatic encephalopathy or uremia leads to cognitive impairment impacting every arena of life. Transplantation reverses the metabolic effects of end-stage liver or kidney failure. However, the immunosuppressive medications tacrolimus and cyclosporine do have neurologic side effects that may impact posttransplant cognition.

Liver transplant recipients demonstrate improved cognition and normalization of the electroencephalogram.⁷ Similarly, kidney transplant recipients' cognitive function improves to a level at par with the general population.⁸

Physical Function

In a study of 279 transplant recipients (among them 88 kidney and 77 liver recipients), physical function improved significantly from pretransplant levels with sustained benefits at 4 years posttransplant. Despite this improvement, the functional status achieved was less than that of the general population.⁹

Because chronic illness negatively impacts functional status, physical therapy and rehabilitation should be considered in all transplant recipients. Long-term supervised

Download English Version:

<https://daneshyari.com/en/article/3791583>

Download Persian Version:

<https://daneshyari.com/article/3791583>

[Daneshyari.com](https://daneshyari.com)