Kidney Transplantation: The Pioneer Work Continues

Did you know?

1. The first successful kidney transplant in history was carried out at Peter Bent Brigham Hospital (now Brigham and Women's Hospital) in 1954 between twin brothers.

2. The introduction of dialysis made kidney transplantation possible. The first dialysis machine (Kolff-Brigham Kidney) was developed at Peter Bent Brigham Hospital. Dialysis continues to save millions of lives and can be a bridge to transplant.

3. The first kidney transplant from a deceased donor was carried out at Peter Bent Brigham Hospital. Today, the majority of kidney transplants are from deceased donors.

4. Medication to prevent rejection, known as immunosuppression that are still used today, also started at our institution.

5. The Brigham Transplant Program played a critical role in the creation of the American Society of Transplantation and has trained more presidents of the society than any other program.

6. With the tremendous improvements in transplant management at the Brigham and nationwide, most patients with kidney failure are eligible for transplantation. The Brigham aims to serve our diverse population of patients with full attention to health equity and social justice.

7. The Brigham continues to lead many innovations. Our histocompatibility (tissue typing) lab performs high resolution genetic testing for 12 solid organ transplant programs in the 6 New England states to allow matching for recipients and optimization of immunosuppression.

Brigham and Women’s Kidney Transplant Program

The Brigham and Women's Kidney Transplant Program is the oldest program in the world and is responsible for many innovations that have greatly improved the lives of transplant patients.

We have a team of committed and gifted surgeons, physicians, nurses, social workers, pharmacists, nutritionists, researchers and counselors whose special expertise guarantees that our patients receive the best treatment available. As we continue to advance the field of transplantation a growing numbers of patients benefit from world-class care tailored to their condition.

Ready to learn more?

Visit us online: www.brighamandwomens.org/renaltransplant
Email us: bwhkidneytxreferral@partners.org
Living Donor Center

Last year almost half of the kidney transplants we performed were from living donors—a higher proportion than any other transplant center in the area.

• We are the only Center of Excellence in New England with the National Kidney Registry facilitating options for donor/recipient pairs with age discrepancies, matching issues, or other unique situations.

• Our close collaboration with the National Kidney Registry also allows us to offer patients on our waiting list organs from altruistic living donors.

• **Enhanced Recovery After Surgery (ERAS):** The ERAS protocol improves the post-operative experience for donors with improved pain control, decreased opiate use, avoidance of prolonged fasting and shorter hospital stays.

Deceased Donor Transplantation

When there is only an option for a kidney from a deceased donor, we are using innovative strategies to reduce their time to transplant. Up to a quarter of all deceased donor kidneys end up not being used. We evaluate and discuss with the patients every deceased donor offer to see how we can use as many organs as possible to safely increase the rate of transplantation.

• Hepatitis C is a virus that can damage the liver. We now have medicines that treat this virus to allow safe transplantation of kidneys from a donor with hepatitis C to shorten the time to transplant.

• Placing two kidneys from a donor, that would otherwise not be used, into one recipient, with outcomes similar to recipients that receive one kidney.

• Use of blood group A kidneys into blood group B kidney recipients when it is safe to do so in order to decrease the long waiting time for blood group B patients.

Evaluation Flexibility

Our one-day evaluation clinic allows many patients (living donors and recipients) to complete nearly all of their testing and medical evaluations for kidney transplant in a single visit to our main campus. Alternatively, patients can start their transplant evaluation process at our conveniently located clinics in Foxborough or South Weymouth, with testing available at any MGB location, and virtual visits with our social work, nutrition, and pharmacy specialists.

Medical Expertise

Our world-class medical specialists collaborate to provide the best patient care for you, including:

• **Cancer Prevention:** At Dana-Farber/Brigham and Women's Cancer Center (DF/BWCC), our partnership creates prevention strategies for all individuals before and after transplant. When patients have had cancer prior to transplantation our collaboration optimizes avoidance of cancer recurrence and kidney protective therapy if cancer does develop.

• **Heart Health:** The Heart and Vascular Center at BWH provides integrated care to seek the best solutions for heart disease using a collaborative approach to keep you and your kidney safe.

• **Fertility:** Did you know that pregnancy is possible after kidney transplantation? We celebrate many successful births with the collaboration of our fertility specialists within our internationally-renowned Division of Gynecology and Obstetrics. Pregnant transplant recipients are closely followed by a maternal fetal medicine specialist.

• **Non-invasive monitoring of kidney health:** Brigham physicians use state-of-the-art non-invasive tests (some developed at the Brigham) to monitor and treat kidney transplant related diseases. These tests can often avoid invasive biopsies.

• **Genetics:** We are using advanced technology to detect genetic predisposition for kidney disease in recipients and living donors. We do this in collaboration with our genetic experts at the Brigham for improved counseling and to help avoid recurrent kidney disease.

• **Obesity:** Being overweight can be an obstacle to transplant. We collaborate with the Program for Weight Management & the Center for Metabolic and Bariatric Surgery to evaluate patients for medical, surgical, and behavioral interventions. Weight loss both improves how long you will live, and can extend how long the kidney will last.

• **Age:** We consider health rather than age as the basis for donors and recipients.

Also Provides Second Opinions

Our expert physicians and surgeons provide second opinions for complex cases to determine if transplantation is the best option for you as renal replacement therapy.