- Transplantation of organs, tissues, etc

The danger for kidney transplant patients

Preserving kidney function post transplantation through nutrition and exercise

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Kidney transplant is not a cure but a treatment for end stage kidney disease (ESKD). The process, from initial evaluation and waiting for a donor to ongoing evaluations, undergoing the actual procedure, and post-transplant, may be rigorous and costly. The benefits of kidney transplant, however, include improved survival benefit compared to dialysis, improved quality of life, and a more economical cost compared to undergoing long-term dialysis.

What is a kidney patient's greatest concern after undergoing a kidney transplant? How to prevent organ rejection. The new kidney from a human donor can be recognized by the patient's immune system as foreign. Therefore, medications known as immunosuppressive drugs to suppress immunity must be taken for life in order to prevent the patient's immune system from attacking the donated kidney. Otherwise, it will result to organ rejection. Unfortunately, suppressing the patient's immunity increases the risk of developing cancer and getting infections.
Aside from suppressing immunity, there are other factors that a patient must take into careful consideration to prevent damaging the new kidney. One must ensure that the blood glucose level and blood pressure are at optimum levels. Thus, diabetes and hypertension must be managed. Over 40 percent of End Stage Kidney Disease patients have diabetes mellitus. This isn't surprising as most start off by having uncontrolled blood glucose level, which caused the damage in the kidneys.
One of the major side effects of taking immunosuppressive drugs to prevent kidney rejection post transplantation is hyperglycemia or elevated blood sugar level and insulin resistance. This is a condition when the body produces the hormone insulin but the cells in the body are resistant to it. Thus, leaving sugar in the blood instead of transporting glucose inside the cells to be used up as energy. Insulin resistance results to hyperglycemia.
Aside from medications, proper nutrition and exercise are equally important in addressing hyperglycemia and other complications of kidney transplant. Unfortunately, these aspects of kidney transplant care are not given that much importance. We focus on medications all the time, leaving nutrition and especially exercise at the bottom of the priority list.
Before a patient ends up getting a new kidney, he or she undergoes dialysis, which technically strips him or her of nutrients causing malnutrition, unless properly managed nutritionally by a registered nutritionist dietitian. This is if the patient is able to feed well.
"About 40 percent of patients undergoing maintenance dialysis suffer from varying degrees of proteinenergy malnutrition. This is a problem of substantial importance because many measures

of nutritional status correlate with the risk of morbidity and mortality," according to Rajnish Mehrotra and Joel D Kopple of Division of Nephrology and Hypertension, UCLA School of Medicine, USA.

Protein energy malnutrition in addition to lack of exercise results to frailty, a condition of being weak and delicate. The quality of life declines with frailty. Loss of muscle mass increases fat accumulation and health complications occur.

In 2015, M. A. Mcadams-demarco et al's study on frailty and mortality in kidney transplant recipients concluded that regardless of age, frailty is a strong, independent risk factor for post-kidney transplant death.

Frailty has five criteria, according to the Fried frailty phenotype—unintentional weight loss or shrinking by more than or equal to five percent of body weight in prior year, weakness or poor handgrip strength, poor endurance and energy as indicated by self-reported exhaustion, slowness or slow walking speed, and low physical activity level.

If you are a post-kidney transplant recipient suffering from malnutrition and frailty, do not lose hope. You can begin by setting small goals, such as eating quality protein sources from plants. Contrary to what most claims say that plant protein isn't of high biologic value, a variety of legumes, vegetables, and whole grains can adequately provide protein for muscle building. Plant-based protein like soy does not put a burden on the kidneys as compared to animal protein. If you choose to add animal-based protein, fish is a good option.

As for exercise, as long as you ensure that floors aren't slippery and you have rubber soled shoes, start with walking for a few minutes a day. Gradually increase the duration, speed, and frequency as you build endurance.

Aim to develop muscular strength by being able to pick up items from the floor. Working with a fitness coach on strength training and functional training will prevent muscle mass loss. Do some aerobic exercises that increase your heart rate, such as walking, biking, and jogging. Some exercises that improve balance and flexibility are also beneficial. These are yoga and pilates.

Before starting

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an exercise program, make sure you get a go signal from your physician.

Remember that organ transplantation is not the end to your end stage kidney disease. It is a treatment that gives you a second chance to live a quality life. Make an effort to preserve your new kidney through proper nutrition and regular exercise.

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