Monitoring and Screening of Kidney Transplant Recipients

Kidney transplants are the preferred way of replacing kidney function in children and adolescents. Frequent visits to your pediatric kidney doctor and routine screening with a physical exam, blood-work and x-rays or ultrasounds can help a kidney transplant recipient – and the transplanted kidney itself - stay healthy for a long-time.

This hand-out describes what to expect at your regular visits after the first year after getting a kidney transplant. Your visit may be different based on your individual needs.

**Monitoring Immunosuppressive Medications**

- The levels of immune suppressing medicine in your blood is checked about once a month, and more frequently if kidney function or the dose changes.

**Monitoring Kidney Transplant Function**

- Creatinine, a blood test that measures kidney function, is checked every 2 months
- Urine protein is checked once a year

**Immunization**

- Hepatitis B surface Antibody is checked once a year. If the level is less than 10 mIU/mL, a booster immunization is given
- Influenza immunization (the shot type) is given once a year in the fall.

**Screening for Viral Diseases**

- A test for BK Polyoma Virus is checked once a year
- A test for Cytomegalovirus (CMV) is checked once a year
- A test for Epstein-Barr Virus (EBV) is checked once a year. A physical exam every 2 months looks for abnormal lymph nodes which could be a sign of the EBV-related Post-Transplant Lymphoproliferative Disease (PTLD)
Blood Counts

- A complete blood count (CBC) is checked once a year.

Growth and Development

- Your growth is checked every 6 months until you reach your adult height.

Diabetes Mellitus

- A hemoglobin A1c (HbA1c), a test for diabetes, is checked once a year. It may be checked more frequently if the dose of immune-suppressing medicines is changed.

Helping Preventing, Detecting, and Treating Nonadherence

- Taking lots of medicines on a strict timeline is tough, and even more so for children and teenagers. Patients and family members are given help to make sure medications are taken regularly.

Blood Pressure, Cholesterol, Tobacco Use, and Obesity

- Blood pressure is checked every 2 months.
- A cholesterol test is checked yearly for all patients older than 13 years.
- Avoiding smoking and tobacco use is discussed at least once a year.
- Height and weight are checked at each visit. Sometimes the waist circumference may be checked. The body mass index (BMI) is calculated. If the BMI is too high, a weight-reduction program if offered.
- Exercise at least 30 minutes a day will help your kidney stay healthy.
- A good diet, low in sodium and low in junk food, will help you maintain a healthy weight.

Skin Care

- Patients with transplants have a higher than average risk of getting skin cancer, especially if they have fair skin, live in sunny climates, work outside, or have a history of skin cancer.
- The use of high SPF sunscreen and appropriate sun-blocking clothing is discussed during the spring and summer.
- A physical exam of your skin – head to toe – is done once a year.
Bone Health

If your kidney transplant is not working 100%,

- Calcium and phosphorus are checked every 6 months
- A hormone called ‘PTH’ or parathyroid hormone, is checked once a year.
- Your vitamin D level is checked once a year.

Reproductive Health

- Going through puberty is an important time to monitor your kidney transplant. Your doctor will perform a physical at every visit to check for the start of puberty.
- Immune suppressing medications are important to monitor if you plan to have children in the future, and they can make you more likely to get infections.

Mental Health

- Your doctor will ask you about depression and anxiety at each visit.