Tacrolimus (Prograf® or Advagraf®)

What is it?

- Tacrolimus can be used to treat various types of kidney disease.
- Tacrolimus was originally developed to prevent organ rejection in people with kidney, heart or liver transplants.

Why did my doctor prescribe or recommend it?

- Healthy kidneys contain many little filters that are responsible for filtering out excess water, salts and waste products from your blood. Your kidney disease is caused by your immune system attacking these filters and causing them to scar up and stop working.

How does it work?

- Tacrolimus works by weakening your immune system and reducing the damage caused to your kidneys. The goal is to make your kidney disease less active to prevent permanent damage to your kidneys.

What doses are recommended?

- The dose is based on your medical condition, weight, response to therapy and the drug levels in your blood.

Are there any safety concerns?

- This medication can lower the body’s ability to fight an infection. Notify your doctor promptly if you develop any signs of an infection such as fever, chills or persistent sore throat. The doctor may put you on antibiotic to lower the chance of getting sick with an infection.
- Tacrolimus may cause upset stomach, diarrhea, nausea or vomiting. If this occurs, taking the medication with food may help.
- You may get a hand tremor while on this medication. It usually improves or goes away with time.
- This medication may cause headaches. Tylenol® (acetaminophen) can be used for minor headaches, but avoid other over-the-counter pain medicines. If you have headaches that are bothersome or occur more than usual, be sure to tell the Renal Health Clinic.
- Tacrolimus can cause high blood pressure, high potassium and high cholesterol. Your doctor will do blood tests and may ask you to change your diet or prescribe medication for these.
- Tacrolimus may slightly increase your risk for certain types of cancer, such as skin cancer. Be sure to protect yourself from the sun.
- Tacrolimus can cause high blood sugar and may cause diabetes if used for an extended amount of time. Your doctor will do blood tests and may ask you to change your diet or prescribe medication to lower blood sugar.

**While taking tacrolimus:**

*Flu and pneumonia (Pneumovax) vaccines* – Tacrolimus can weaken the immune system. It is recommended to have the flu shot every year in the fall. The pneumonia vaccine is also recommended and can be given at any time of the year.

*Lab Tests* – We can monitor the level of tacrolimus in your blood. **For this blood test, do not take your morning dose of tacrolimus and go to the lab in the morning.** After the blood test is done take your morning dose of tacrolimus.

*Drug Interactions* – Tacrolimus has many drug interactions. Check with your pharmacist or doctor before taking any new medications, including prescription, over-the-counter and herbal products.

*Avoid Grapefruit, Grapefruit Juice and Pomegranate Juice* – These juices can greatly increase tacrolimus blood levels.

**What else can I do?**

*WHEN TO TAKE* – Tacrolimus may be taken with food or on an empty stomach. You should try to be consistent (always with food or always on an empty stomach). If you develop upset stomach, nausea, vomiting or diarrhea then try taking with food. Tacrolimus should be taken every 12 hours and you should try to take your dose at the same time every day.

*IF YOU MISS A DOSE* – Take it as soon as you remember if it’s within 6 hours of your usual time. If you remember after 6 hours, skip the dose completely and continue with your next scheduled dose. Never double the dose or take an extra dose.
STORING YOUR MEDICATION – Store at room temperature but do not store it in the bathroom. Keep tacrolimus away from extreme temperatures (very hot or very cold). Keep the capsules in the original packaging until you are ready to take them.

PREGNANCY AND BREASTFEEDING – Your doctor may choose to keep you on tacrolimus during pregnancy based on individual risks and benefits. Tacrolimus use is probably safe during breastfeeding but the baby should be closely monitored, which may include checking a tacrolimus blood level in their blood. Inform the Renal Health Clinic if you are pregnant, planning to become pregnant or breastfeeding to discuss the risks and benefits.

CLEAN YOUR HANDS FREQUENTLY – Tacrolimus can increase your risk of infections even if your white blood cell counts are normal. Washing your hands with soap and water or using a hand sanitizer before you eat and at other times throughout the day will help prevent infections.

TRY TO AVOID OTHER PEOPLE WITH INFECTIONS IF POSSIBLE – If someone you know is sick with a cold, flu, pneumonia, or other infection try to avoid visiting them until they are better. If someone in your house is sick then clean your hands frequently and, if possible, have another person care for them.