TACROLIMUS



Answers to questions you may have about tacrolimus

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What is tacrolimus?

Tacrolimus, also known as FK506, is an immunosuppressive medication that is sometimes prescribed for individuals with autoimmune myasthenia gravis (MG). It is manufactured as a capsule. Oral tacrolimus has both immediate-release and extended-release forms. You can purchase tacrolimus in generic form or by brand names such as Astagraf XL®, Envarsus XR®, Hecoria® and Prograf®. Tacrolimus is also available as a solution for injection.

How does tacrolimus work?

Much like the drug cyclosporine, tacrolimus inhibits calcineurin and suppresses the autoimmune response that is responsible for causing the fluctuating and fatigable muscle weakness of MG.

How soon should I see a response?

Although some people have reported improvement in as little as 10 days, more commonly you may expect to notice a gradual improvement of myasthenic weakness after one month of taking tacrolimus. Other people with MG may take a longer time to see a response. Similar to other immunosuppressive medications, some patients may not experience a benefit from its usage.

How is tacrolimus taken?

Tacrolimus must be taken exactly as

taken exactly as
directed by your
doctor. Never
increase, decrease,
or stop taking it
without checking
with your doctor.
The immediaterelease form is taken

in divided doses (usually 12 hours apart), and the extended-form is taken once daily (usually in the morning). Swallow capsules whole and do not break or chew them. Tacrolimus needs to be taken on an empty stomach (at least 1 hour before or 2 hours after a meal) to assure good absorption as food reduces its bioavailability. Alcohol modifies the absorption of tacrolimus, and tacrolimus should not be taken with alcoholic beverages. Finally, grapefruit juice should be avoided as it may alter the metabolism of tacrolimus.

It is important that all of your health care providers know you are taking tacrolimus because it can interact with other medicines, causing undesirable effects. The list below will help you and your physician know which medications may produce problems while you are taking tacrolimus.

Drugs that may cause more toxicity when combined with tacrolimus

- Antibiotics –levofloxacin (Levaquin®)
- Potassium sparing diuretics spironolactone (Aldactone®)
- Immunosuppressants fingolimod, leflunomide, natalizumab
- Miscellaneous clozapine (Clozaril®)

Drugs that may modify tacrolimus effectiveness

- Antibiotics azithromycin (Zithromax®), erythromycin, rifampin (Rifadin®)
- Antifungal medications: fluconazole (Diflucan®), itraconazole (Sporanox®), ketoconazole (Nizoral®), voriconazole (Vfend®)
- Miscellaneous colchicine, corticosteroids, Schisandra, St. John's Wort
- Anticonvulsants phenytoin (Dilantin®)

What will my doctor want to know before prescribing tacrolimus?

Since tacrolimus is a strong medicine, you and your doctor and must consider its risks and benefits. Your doctor will ask you about:

- Current medications and treatments.
- History of any allergies.
- History of high blood pressure.
- History of liver or kidney disease.
- History of diabetes.
- Any recent infections or immunizations.
- Pregnancy, planning a pregnancy or breastfeeding.

What are some special considerations when taking tacrolimus?

Your physician
will check blood
tests regularly
to monitor
for significant
changes. BUN and
serum creatinine
are checked before
beginning tacrolimus,
then once a month for the

first 3 months, and then every

3 months while taking tacrolimus. Tacrolimus blood levels are performed weekly for the first month after starting, and periodically thereafter, especially after a change in dose. Trough blood levels are drawn, just before the next dose is due. A trough level measures the lowest concentration of tacrolimus in your bloodstream and is monitored to ensure that a therapeutic level is maintained. Blood pressure and renal function should also be monitored closely when taking tacrolimus.

Tacrolimus may cause unwanted side effects. some of which may be serious. Other side effects may go away as your body adjusts to the drug. It is important to notify your health care providers about side effects. Allergic reactions can be life threatening and you should get emergency help at once. These include hives; severe itching; tightness in the neck or chest; trouble breathing; or swelling of the lips, tongue or throat. Also serious, are blood in the urine, confusion and seizures. Tacrolimus may cause tremors, worsen diabetes or cause a low magnesium level in the blood.

Tacrolimus may cause increased susceptibility to bacterial, viral, fungal, and protozoal infections, including opportunistic infections and the possible development of malignancies such as lymphoma or skin cancer. It is important that you talk over any concerns you may have about tacrolimus with your doctor.

Your Notes





Myasthenia Gravis Foundation of America

Our Vision: A World Without MG

Our Mission: Create Connections, Enhance Lives, Improve Care, Cure MG

This publication is intended to provide general information to be used solely for educational purposes. It does not address individual patient needs and should not be used as a basis for decision making concerning diagnosis, care, or treatment of any condition. Instead, such decisions should be based on the advice of a physician or health care professional who is directly familiar with the patient. Any reference to a particular product, source, or use does not constitute an endorsement. MGFA, its agents, employees, directors, its Medical Advisory Council or its members assume no responsibility for any damage or liability resulting from the use of such information.

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Approved by the MGFA Medical Advisory Council

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