



Temple Street

CHILDREN'S UNIVERSITY HOSPITAL

# Tacrolimus

## Information for Parents/Carers



St Michael's C Ward

01 878 4258

01 878 4431

Main Hospital Number

01 878 4200

## What is tacrolimus and what is it used for?

Tacrolimus is an immunosuppressant drug, used to prevent rejection after organ transplantation. It may also be used in the treatment of nephrotic syndrome when steroids no longer help, or in other immune disorders.

The immune system can fight or reject a transplanted organ because it treats the new organ as an invader.

It is important that your child takes tacrolimus to help manage their illness, or to prevent their body from rejecting their transplanted kidney. It can be used in combination with other medicines if needed.

## How is tacrolimus supplied?

- Suspension as 2.5mgs in 5mls.
- Capsules (prograf) as 0.5mgs, 1mg and 5mgs.
- Granules (modigraf) as 0.2mgs and 1mg.

These are only available on a special prescription known as a High Tech script from your doctor.

## How should tacrolimus be stored?

Store tacrolimus at room temperature away from moisture and heat. The liquid also can be left at room temperature. Do not freeze. Ensure tacrolimus is locked away safely and out of reach of children. You should always follow the instructions on the packaging as instructed by the manufacturer.

## How should tacrolimus be given?

It is important that your child takes this medicine exactly as prescribed by their doctor. Tacrolimus is usually given 2 or 3 times a day, 8 or 12 hours apart. Taking the doses 12 hours apart will have the best effect. Your child must swallow the tablet whole.

When giving tacrolimus, it should be taken on an empty stomach, as food affects how it works. It is advised not to eat or drink anything except water for 30 minutes before and after taking the medicine.



## Suspension

Shake the oral suspension (liquid) well just before you give it to your child.

Measure the suspension with a special spoon, medicine cup or syringe. If you do not have a measuring device, ask your pharmacist for one.

## Capsules

The capsules must be swallowed whole. Do not open the capsules, crush or chew them.

## Granules

The granules are mixed with water and give the prescribed amount.

## Safety Precautions

The medicine from a crushed or broken pill can be dangerous if it gets into your eyes, mouth, nose or on your skin. If this happens wash your skin with soap and water, or if it gets in to your mouth, nose or eyes rinse it out with water.

Ask your doctor, nurse or pharmacist how to safely handle the medication. You should wash your hands before and after giving the medication and wear gloves when drawing up and giving the liquid.

## What doses of tacrolimus should my child get?

It is vitally important to give the correct dose. Blood tests will be taken to check how much tacrolimus is in your child's blood. The dose may be changed depending on the results, you will be notified if the dose needs to be changed. If you are unsure of the dose, please call your nurse / doctor.

## What happens if my child misses a dose?

Give your child the missed dose as soon as you remember. Skip the missed dose if it is almost time for the next scheduled dose. Do not use extra medicine to make up the missed dose. Contact St Michael's Ward or the Renal Clinic for advice.

## What happens if I give my child too much?

Seek medical attention. Symptoms may include some of the side effects listed.

## What should I do if my child vomits after tacrolimus?

If your child vomits within half an hour of having taken the medication, it may not have been absorbed. Repeat the dose and give the next dose at the normal time.

If your child is generally unwell or has diarrhoea / upset stomach you should inform your doctor immediately as this may alter their tacrolimus blood level. Your doctor / nurse can give you advice on what dose to give or if a dose needs to be held.

## What should my child avoid while taking Tacrolimus?

- Avoid taking antacids without your doctors advice. Use only the type of antacid that your doctor recommends. Some antacids can make it harder for your body to absorb tacrolimus.
- Avoid being near people who are sick or have infections. Inform your doctor if your child develops signs of infection.
- Avoid activities that may increase your child's risk of bleeding or injury.
- Avoid exposure to sunlight or tanning beds. Your child should wear protective clothing and use sunscreen (SPF 50) when outdoors.
- Avoid taking new medication without checking with your doctor or nurse, especially antibiotics.
- Tacrolimus should NEVER be given with grapefruit juice as it can affect the way it is absorbed in the body.



# Tacrolimus side effects

## Possible Side Effects

There are positive and potential unwanted side effects to all medications. Many of the negative side effects occur in only few children. It is not possible to predict which children will develop which side effects. Unwanted side effects are often temporary and when reported to the Renal Team can be improved by changing your child's medication routine.

For the purpose of this leaflet only the commonly seen side effects will be discussed.

Side effects of tacrolimus can include;

### Mild side effects

- Abdominal pain, vomiting, nausea and diarrhoea.

As diarrhoea can cause the levels of tacrolimus to rise in the blood, it is vital that you contact St Michael's C Ward if diarrhoea starts. Vomiting and dehydration can raise the levels of tacrolimus and creatinine, which can potentially damage the new kidney. Contact the Renal Clinic or St Michael's C Ward if any of these occur.

Diarrhoea associated with tacrolimus usually improves after 2-3 weeks and can be improved by altering the dose. It is important that the team is made aware if your child had any of the unwanted side effects mentioned above.

### Severe side effects

- Headaches, high blood pressure and in rare cases seizures.

If this occurs, your child's tacrolimus dose may be changed or alternatively your child may receive medication to reduce their blood pressure.

- Increased risk of infections (particularly viral). It is important to report any signs of infection (for example a cough, sore throat or temperature) or any lumps or skin changes to your doctor. Please inform your nurse / doctor, if your child is in contact with chicken pox or measles.

## **Other important information about tacrolimus:**

### *Can tacrolimus be given with other medicines?*

Some medicines may affect how well tacrolimus is absorbed. Your doctor / nurse will be aware of this. If your G.P. or dentist prescribe any medications you should always check with the hospital before giving them. The same applies for herbal medicines.

### *Monitoring the blood levels of tacrolimus:*

It is very important blood levels are measured. This is to prevent toxicity (levels that are too high), side effects and to ensure that the levels in the blood are adequate to prevent rejection. If levels are too high, it can make creatinine levels rise and potentially damage the kidney.

Levels are checked usually 11½ - 12 hours after the night time dose is given,( when it is taken twice a day) or 7½ - 8 hours if it is taken three times a day. It is important to tell the person taking your child's bloods the time the last dose was given. Your child's usual daily dose can then be given after bloods are taken.



It does not matter if this dose is taken a little later than usual. The importance of tacrolimus monitoring and dose changes will be discussed in detail before you take your child home. Please ensure you understand this before you leave.

### *Vaccinations:*

While on tacrolimus, you should ensure your child has yearly flu vaccines along with another vaccine called pneumovax by their GP. This is normally only given once. Live vaccines, such as MMR and TB should not be given. The antibody response to other vaccines may be diminished.

### *Pregnancy:*

Female patients of child bearing age are advised to take precautions to prevent pregnancy while taking this medicine. If you become pregnant while on tacrolimus, do not stop taking the medicine but seek medical advice as soon as possible.

### *Viral Monitoring*

EBV (Epstein Barr Virus) is a virus which causes glandular fever and can become active in the body after a transplant. Your child will be monitored for this in routine blood tests.

## **Further Information**

We hope this information leaflet will help you understand about tacrolimus. However, it is important to raise any concerns or questions with your child's consultant or contact St. Michael's C Ward.

*Always read the information leaflet supplied with your medicines. The information in this leaflet does not replace it.*

Please remember to wash your hands or use  
hand gel when visiting the Hospital

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The information contained in this leaflet is correct at time of print