

Has your immunosuppressant medication changed recently?

An important message for all transplant patients

Transplant patients depend on immunosuppressant drugs to prevent rejection of their new kidney or other organ. But, as transplant surgeon, **Miss Laura Buist**, and *Kidney Life* deputy editor, **Sue Lyon**, explain, patients now need to take extra care when taking their tablets.

Patients can often find that their immunosuppression changes over the life of their transplant, so that they take different combinations of drugs such as ciclosporin, tacrolimus, mycophenolate mofetil (MMF), enteric-coated mycophenolate sodium (MPS) or sirolimus. But now things are becoming complicated with the arrival of generic versions of ciclosporin, tacrolimus and MMF. A generic drug is a copy of a brand-name drug that is no longer protected by patent.

Generic products available when *Kidney Life* went to press are listed in the table alongside the original brands, but more generics are on the way. To add to the confusion, a generic version is available for twice-daily tacrolimus (Prograf), but not for the once-daily tablets (Advagraf) or the granules (Modigraf). There are also no immediate plans to launch generic versions of mycophenolate sodium (Myfortic) or sirolimus (Rapamune).

Active ingredient	Original brand	Generic brands
Ciclosporin	Neoral	Capimune, Deximune
Tacrolimus	Prograf	Adoport
MMF	Cellcept	Arzip; unbranded MMF from companies including Actavis, Dr Redy, Mylan, Sandoz, Teva

WHY WORRY?

Why do we need to worry about generic immuno-suppressants? After all, generic drugs are simply copies of familiar drugs. Generics can save money for the NHS because they can be cheaper than the original. And many transplant patients are probably taking generics for high cholesterol or high blood pressure.

The NKF supports use of generics where there are no safety concerns, but drugs like ciclosporin and tacrolimus are different. They are 'critical-dose drugs'. Drug levels in the blood must be kept within narrow limits: go too low or too high, and it could mean rejection and loss of the transplanted kidney or increased side effects respectively. This means that it is absolutely essential to avoid switching between different versions of ciclosporin and tacrolimus. It is unclear whether the same level of care should be taken with MMF, but equally there is no real evidence that it is safe to switch. And you should definitely not switch between MMF and MPS, which are different drugs.

It is possible to transfer to a different version of a regular immunosuppressant, but only if the patient is very carefully monitored for any risky changes in blood levels of the drug,

creatinine or kidney function. So the product licences for generic immunosuppressants state that these drugs should only be started and continued by a transplant specialist.

WARNINGS

This is why the NKF warns patients against switching medicines, or accepting a change in treatment made by anyone other than a doctor at the transplant or renal unit. Most transplant patients are not just taking immunosuppressant drugs. They are often on a combination of tablets for other health problems, and in some patients a different immunosuppressant could interact dangerously with other tablets.

Even something as simple as fruit juice can be a problem. Patients taking ciclosporin or tacrolimus know to avoid grapefruit and grapefruit juice, but apple juice affected the blood levels of a generic ciclosporin launched in the USA. This is not a problem with Neoral, the original version of ciclosporin. In fact, patients taking the liquid are advised to dilute it with apple juice to improve the taste!

We have already seen what can happen when community pharmacists, doctors or patients themselves accidentally switch immunosuppressants. By the end of 2008, there were 55 mistaken switches between once-daily and twice-daily versions of the original brand of tacrolimus, most of them in the UK and some leading to serious problems, including acute rejection.

TAKE CARE

From now on all transplant patients need to take even more care than usual with their medication:

- Make sure that you always take the same brand of drug, unless switched by your transplant unit. The brand name is printed on the drug packaging, together with the dose, in large type. The active ingredient of drug - ciclosporin, tacrolimus or MMF - is printed in smaller type below.
- If your GP prescribes your immunosuppressant drugs, ask that they be 'prescribed by brand'. This ensures that the same brand is always printed on your prescription and that your community pharmacist cannot switch to another brand. When you collect your drugs from the pharmacist, query any changes in the appearance of your immunosuppressants or their packaging.
- If you are unsure about the drug you have been given, never take it without getting advice from your transplant unit. Tell your transplant unit immediately if you think you may have accidentally taken the wrong brand, or mixed your usual and another version of an immunosuppressant.
- If you think you may have experienced problems, help other patients by letting the authorities know. Make a 'Yellow Card' report: call the freephone hotline at 0808 100 3352, go online at yellowcard.mhra.gov.uk, or get a form from your local pharmacy or GP surgery. Tell your transplant unit you are making the report.

No transplant patient should ever be worried about challenging anyone - whether a GP, a nurse, a hospital doctor outside the transplant unit, or a pharmacist - about their drugs. Remember, it is *your* transplant and *your* health that are at stake.

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Laura and Sue are members of ESPRIT, an independent group of health professionals and patients committed to ensuring effective and safe prescribing in transplantation. For more information, visit our website at www.esprit.org.uk