

What I tell my patients about over-the-counter medications



■ Patients who have high blood pressure or heart problems should avoid over-the-counter medications containing pseudoephedrine, a decongestant

People with kidney impairment or transplants are able to treat themselves for minor illnesses and ailments using medicines bought over the counter from local pharmacies. This article gives guidance on which medicines can be used safely, which should be avoided and when medical advice should be sought.

Some over-the-counter medicines may not be suitable because they are not effective if the kidneys are impaired; side-effects may be more common or severe, renal function may worsen or the over-the-counter medicine may interact with regular medicines being taken. Table 1 details which medications are suitable for kidney patients, and those to avoid.

To obtain the most appropriate medicine and receive the best treatment, the advice of the pharmacist should be sought. They should be made aware of the following information:

- Severity of kidney impairment
- Treatment (such as dialysis or transplant)
- Allergies
- Any other medical conditions (such as diabetes or high blood pressure)
- Other medicines the patient may be taking (especially any immunosuppressant medicines, aspirin or warfarin).

Pain relief

Paracetamol should be the first-choice medication for pain relief for almost all patients. This is because it

does not affect the kidneys or interact with other medicines, and it produces few side-effects. The maximum dose (two 500 mg tablets, four times per day) should not be exceeded, and this dose is safe for all people whose body weight is over 50 kg, even if taken regularly.

For some people, paracetamol is not effective, and a stronger painkiller may be required. Co-codamol – a combination product containing paracetamol and low-dose codeine – can be purchased, and is suitable for short-term use. However, codeine may cause drowsiness and constipation, and high doses are associated with more frequent side-effects in patients with kidney impairment. The body gets used to the effects of codeine, so it should only be used for three to four days before medical advice is sought.

Ibuprofen is a commonly used painkiller that also reduces inflammation. It should be avoided in all people with kidney problems or kidney transplants, as it can reduce kidney function further and, also, cause stomach ulcers – especially in those on dialysis.

Aspirin is a similar medicine to ibuprofen, and many people will be on a small dose to thin the blood. Higher doses, needed for pain relief, should be avoided as with ibuprofen. In patients who are on dialysis and who produce no urine at all, this group of medicines may be used, but this should only be on the advice of the patient's kidney doctor.

Ibuprofen is also available in a gel formulation for muscular aches and pains. This – as well as Ralgex® (SSL International), which contains an aspirin

Charlotte Mallindine MPharm
MSc Renal Pharmacist,
Royal Free Hospital,
Hampstead, London

Table 1. Curing common ailments with over-the-counter medicines

Ailment	First-choice medication	Second-choice medication	Medications to avoid
Pain relief	Paracetamol	Co-codamol	Ibuprofen Aspirin
Colds and coughs	Simple linctus to soothe coughs and sore throats Menthol or steam inhalation to clear any congestion		Decongestants Guaifenesin or dextromethorphan Combination products
Indigestion	Preparations containing calcium (unless calcium is high)		Preparations containing sodium, potassium or magnesium
Diarrhoea	No treatment	Loperamide	Rehydration salts unless monitored by your doctor
Constipation	Senna	Docusate sodium	Ispaghula husk or lactulose if fluid restricted
Hay fever	Antihistamine eye drops or nasal sprays	Chlorphenamine or cetirizine	Pseudoephedrine
Smoking cessation	All over-the-counter products to help quit smoking can be used by all patients		
Vitamin supplements	Dietary supplements are only suitable for some patients and should be advised by the consultant		

derivative – should be avoided, as these products can be absorbed through the skin and cause the same problems as the tablets do. Deep Heat® (Mentholatum) and other menthol-based muscle rubs can be used instead.

Coughs and colds

For patients receiving immunosuppressant medicines or steroids, only very minor coughs and colds should be self-treated. If little improvement is seen over two days, medical advice should be sought, as people taking these medicines are more prone to infections – which can be serious if appropriate treatment is not commenced promptly.

Cough and cold remedies containing a combination of medicines should be avoided. These usually contain a painkiller such as paracetamol or aspirin, an antihistamine and/or a decongestant. With combination products, the dose of medicine cannot be tailored to the patient's symptoms, and the medicine may contain additional drugs that are not required by the patient and may cause side-effects.

Decongestants such as pseudoephedrine and phenylephrine can raise blood pressure, and so should be avoided if you have high blood pressure or heart disease. Inhaling steam with eucalyptus oil is a very effective decongestant, and Olbas® oil (Lanes Health) products can also be used safely.

For coughs, simple linctus or honey and glycerine syrups can be used – although diabetics should be careful to choose appropriate products, as many of these syrups have a very high sugar content. Cough mixtures containing guaifenesin or

dextromethorphan should be avoided in anyone with kidney impairment.

Any fevers or high temperatures can be treated with paracetamol, but medical advice should always be sought.

Indigestion

Long-standing and frequent indigestion should be investigated by your doctor, as this may be due to an underlying cause or your medication, but occasional indigestion due to a heavy meal can be self-treated.

Many indigestion remedies contain significant amounts of sodium, magnesium and calcium, all of which should be avoided in large amounts, as poor kidney function means the body is unable to remove any excess quantities. Those with high blood pressure should avoid remedies containing sodium. Calcium should be avoided in people with high calcium or phosphate levels. Indigestion remedies may also affect the absorption of some medicines so, if immunosuppressant medications are being taken for a transplant, for example, it is important that a gap of at least two hours is left between taking the immunosuppressant and the indigestion remedy.

Diarrhoea

Diarrhoea may be caused by an infection or food poisoning and, if severe, is not suitable to self-treat. Diarrhoea causes fluid to be lost from the body; this can result in dehydration and also a loss of essential electrolytes such as potassium, magnesium and sodium, which can cause problems. Electrolyte replacement sachets should not be self-administered as fluid balance and electrolyte levels will need to be monitored closely by medical staff to make sure the balance is right.

Diarrhoea is the body's way of removing the bacteria or toxins causing infection. Medicines such as loperamide (Imodium®, Janssen) work by slowing the gut down and will relieve the symptoms, but can also

■ *What I tell my patients about...* is a patient information service specifically designed for renal units to use with their patients. You can now view this, and all of the previous *What I tell my patients about...* articles online and download them free of charge via www.bjrm.co.uk

trap the toxins within the bowel, which can cause further problems. Hence, although loperamide can be taken safely by patients with kidney impairment, it should really only be used to prevent symptoms while travelling to seek medical advice.

If people taking tacrolimus experience diarrhoea, the tacrolimus blood levels may increase, meaning that side-effects (such as tremors) are more common. Further, high tacrolimus levels can damage the kidneys. It is important that patients contact their transplant clinic and arrange to have their tacrolimus level tested, to ensure the levels are within the correct range.

Constipation

Constipation can usually be relieved through dietary changes like increased fibre intake, especially through fruit consumption, but this is not possible for many people following a low potassium diet. Some laxatives, such as lactulose and ispaghula husk (including Regulan®, Procter & Gamble; Fybogel®, Reckitt Benckiser), need to be taken with plenty of water to be effective, which is also not possible for patients who are fluid restricted. Senna is the most suitable laxative for most kidney patients as it stimulates the gut without requiring any extra fluid. Docusate sodium, which acts by softening the stool, can also be used.

Hay fever

Hay fever can be treated with antihistamine tablets, eye drops or nasal sprays. If only the eyes or nose are affected, then sodium cromoglicate eye drops or beclomethasone nasal sprays can be used safely. If the symptoms are widespread, then tablets will be more effective. Kidney patients may already be taking antihistamine tablets for itching – for example, chlorphenamine (Piriton®, GSK Consumer Healthcare) or hydroxyzine hydrochloride (Atarax®, Alliance). More than one type of antihistamine tablet should not be taken, as this can cause severe drowsiness.

If an antihistamine tablet is not already being taken, then cetirizine and loratadine can be taken safely at normal doses. However, chlorphenamine should be taken a maximum of three times per day by patients on dialysis or who have significant kidney impairment.

Benadryl Plus® (McNeil) contains a decongestant, pseudoephedrine, which should be avoided in all patients with high blood pressure or heart problems.

Smoking cessation

Smoking is detrimental for all kidney patients, as it further increases the risk of poor circulation, heart attacks and strokes. Patches, gum, lozenges and inhalators can all be purchased over the counter, although people with kidney problems may be more likely to suffer side-effects from these products, and so may wish to discuss options with their doctor first.

Diabetic patients who try these products may find that their sugar levels are more erratic and, therefore, may need to measure their blood sugars more often.

Vitamin supplements

Those following a renal diet, which restricts potassium and phosphate intake, may need additional vitamin and minerals. To ensure that the correct quantities of the right supplements are taken, these should be prescribed by a doctor.

For renal transplant patients who no longer require renal dietary restrictions, eating a healthy, varied diet is the most effective way to obtain all the vitamins and minerals needed.

Alternative medicines

Homeopathic

It is unknown exactly how homeopathic medicines work, but the more dilute the mixture the more powerful it is thought to be. Homeopathic medicines do not interact with conventional medicines and are not known to adversely affect the kidney.

Herbal medicines

Herbal medicines are often thought to be natural and, therefore, not to produce side-effects or interact with other medicines; however, this is not necessarily the case. Many conventional medicines that are based on plants and herbal medicines can be very powerful. There is less research carried out on herbal medicines in comparison with conventional medicines, so their effect on other medicines and the kidneys is less well documented. Because of this, herbal medicines are not recommended.

St John's wort is one herbal medicine that has certainly been shown to affect immunosuppressant drug levels, as well as other medications, and should definitely be avoided by transplant patients ■

Declaration of interest
None declared.

Key points

- The advice of the pharmacist should always be sought when buying medicines for self-treatment.
- In kidney patients who are considering over-the-counter medications, there should be a very low threshold before seeking a medical opinion.
- Patients who are taking immunosuppressant medicines should be aware that they are at higher risk of infection than others; consequently, they need to take action as soon as symptoms develop.
- If there is any doubt about an over-the-counter medication, the kidney unit should be contacted for advice.