

Patients with asthma: problems revealed by medicines use reviews

Locum pharmacist Perry Melnick has been conducting medicines use reviews since May 2005. This year, with the help of pharmacy manager Lee Doherty, he has already performed over 300 at Manor Pharmacy, his regular locum spot in Letchworth. In this article, he shares some of his experiences of MURs for patients who have asthma

The interventions resulting from performing MURs for patients with asthma are various. They range from correcting misconceptions and identifying side effects to improving inhaler technique and promoting good asthma control.

Adherence

Most pharmacists are aware that a number of patients use their salbutamol or terbutaline inhaler too much, which suggests that their asthma is poorly controlled. Performing MURs has helped me to explore this with them. I have found several to be using their salbutamol daily and have strongly advised them to make an appointment at the surgery or asthma clinic for a review. Sometimes it helps the GP or asthma nurse to have an idea of peak flow at the appointment, so I often recommend that, while waiting for the appointment, the patient starts to record his or her readings morning and night. (Of course, I also check if he or she needs to be reminded on how to use a peak flow meter.) Through checking that patients use the right inhalers at the right time, I have also found those who are using ipratropium or salmeterol for acute attacks. However, with the former, it may be useful to reconfirm diagnosis because some patients with chronic obstructive pulmonary disorder prefer to be “labelled” as having asthma, in which case use of ipratropium *prn* for acute attacks would be appropriate.

MURs are also an opportunity for patients to clarify their GP's instructions, which is especially important when treatment involves several products and a management strategy that can be stepped up or down. There can be a lot to go over with patients — even the order in which their inhalers are used can be discussed. For example, on occasions when salbutamol is needed at the same time as a long-acting beta₂ agonist or an inhaled corticosteroid, it should be used first. Similarly, if salmeterol is used with a corticosteroid, theoretically, the former should be used first and, if convenient, the steroid 15 to 20 minutes later.

Where possible, I also double check that prescribed doses are appropriate. In doing this, I picked up on terbutaline turbohaler prescribed as two puffs instead of one puff (the old metered dose inhaler, discontinued in December 2005, released 250µg per puff so two puffs could be used, whereas the turbohaler delivers 500µg per puff). In these in-



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stances, I have suggested that the patients use one puff up to four times a day and to seek advice from his GP as soon as possible if they found more was needed or little relief was obtained.

MURs can also help reduce wastage. On one occasion, I found that the frequency of use of salbutamol claimed by the patient did not tally with the monthly prescriptions we were dispensing. It turned out that she had a small stockpile at home. Another revealed that she would spray one puff into the air before each use. She was advised that this was only needed when an inhaler is new or when it has not been used for seven days or more.

Knowledge and understanding

MURs are also a chance to reinforce advice. During an MUR, we are supposed to find out if patients know why they are using their medicines and doing so can help reveal misconceptions about their drugs. For example, I found that one patient was not using her salmeterol (although she said her GP knew about this) because she was under the misapprehension that it was a steroid. Moreover, I have found that some patients do not use their steroid inhaler because they do not “feel” it is working in the same way as a puff of salbutamol. MURs have allowed me to allay concerns about using steroids in general. I do this by explaining that because the drug reduces inflammation in the airways, its ef-

fects cannot really be “felt” at the time of use. I emphasise the fact that the preventer should be used regularly and when it works properly, the reliever should hardly ever be needed. I usually suggest that patients keep a diary of how often salbutamol is needed, explaining that they will know if a preventer is working if, after a fortnight's use, they find the reliever is needed less.

Asthma is a long-term condition. It is important, therefore, that patients are aware that their medicines will not always have to increase — some find it encouraging to know that, if good control is achieved, it is standard practice for the GP or asthma nurse to look at reducing doses or even the number of inhalers.

I believe that many patients benefit from having a personalised asthma action plan to help them keep their asthma in control in different situations, such as catching a chest infection. It can be empowering for patients, so I sometimes encourage them to ask for a treatment plan at their next surgery or clinic visit.

Inhaler technique

During an MUR, we are required to ask if the formulation is appropriate. For patients with asthma, this could include asking about inhaler technique. A significant percentage of my patients — I would estimate about 25 per cent — have poor inhaler technique.

Patients can have problems co-ordinating actuating a dose with breathing it in with traditional aerosol inhalers. Such problems are solved with breath actuated or dry powder inhalers. However, with the latter, some patients do not inhale fast enough to optimise drug delivery to the lungs. Conversely, with spacer devices, some patients inhale too quickly. I am aware that an inspiratory flow meter (eg, In-Check Dial from Clement Clarke) could be used in an MUR to measure speed of inhalation which, in turn, can be used to advise on improving technique (the patient can practise using the meter) or even to recommend an alternative inhaler type, but I have never used one myself.

Even if inhaler technique cannot be assessed accurately, I emphasise that good inhaler technique could lead to a noticeable improvement in condition and advise patients that, in order to get the best results from their aerosol inhalers, they should:

- Inhale as slowly and deeply as possible
- Hold the breath for 10 seconds after inhalation
- Leave about one minute between inhalations

Some patients need the help of a spacer device but this is only beneficial if they are prepared to use it. For patients who use a spacer at home but not when they go out, I ask the GP to consider prescribing a smaller device (eg, an Able spacer instead of a Volumatic). With the patient's permission, I also recommend spacer devices to improve drug delivery and decrease the likelihood of a sore throat for those using high dose steroid inhalers (eg, 800µg beclometasone daily or above).

Selecting patients for MUR

In addition to the patient criteria for performing MURs (eg, multiple medicines), I find the following useful for selecting patients:

- Asking those using steroid inhalers if they rinse their mouths after use (those who do not and have oral side effects, such as a sore throat or hoarseness, are invited for an MUR)
- Looking out for patients who want "the blue inhaler only and not the brown", even though they have been prescribed both
- Assessing the patient medication records for information suggesting frequent beta agonist use

The recent discontinuation of Becotide could also provide an opportunity to invite patients for an MUR, as could new treatment guidelines (the guidelines for management of chronic asthma are expected to be reviewed this year).

Patients who have had an MUR previously can be invited for another after 12 months—therapy may have been stepped up or down and good inhaler technique can lapse.

Side effects

Although tremor is one of the most common beta₂ agonist side effects listed in the British National Formulary and I have seen this before, I have not yet come across this in MURs. One patient had tremor in his right hand, which worsened on raising it to the extent that he could not hold a cup. My gut feeling was that this might be essential tremor rather than a side effect of salbutamol and I advised him to consult his GP so that salbutamol could be excluded as the cause of the problem.

A side effect with steroid inhalers is that they can make patients cough. I advise patients who experience this mild paradoxical bronchospasm that using a puff of their salbutamol first can help.

According to the management guideline from the British Thoracic Society and the Scottish Intercollegiate Guidelines Network, for patients in whom a long-acting beta₂ agonist is of no benefit, leukotrienes, theophylline or an oral beta₂ agonist may be prescribed. I checked that a patient taking zafirlukast knew that she should see her GP if she felt sick or tired, had pain on the right side of her stomach (below the ribs) or became jaundiced because liver problems are a rare complication of treatment. Although the summary of product characteristics states that liver injury can occur with no prior clinical symptoms or signs, my advice reinforced the patient information leaflet.

Other issues

The MUR provides an opportunity to check that treatment is based on BTS/SIGN recommendations. One patient, on step 3 of the management plan, told me he was using both his salmeterol and salbutamol inhalers regularly. Regular use of the long-acting beta₂ agonist should reduce the requirement for the short-acting agonist, but this did not appear to be happening. I recommended that he continue using the salmeterol but that he keep a note of how often the salbutamol was needed each day and to make an appointment to see his GP.

MURs are also a good opportunity to ask patients about smoking. I was particularly pleased with one patient who, due to stopping smoking, no longer requires a steroid inhaler and does not need to renew his salbutamol prescription as often.

I have written my own information sheet on inhaler technique for my patients, but other patient information leaflets are available from organisations such as Asthma UK (www.asthma.org.uk).

Paper work and recommendations

MURs are essentially centred around finding out about medicines use, side effects and compliance, and giving information and supporting understanding, and the generally held view is that they should be non-clinical in principle. I always explain to patients that I am not conducting a full clinical review—after all, I do not have all the relevant information to hand.



Clement Clarke

An inspiratory flow meter could be used to assess and improve inhaler technique

The overall standard of prescribing in Letchworth is high compared with other areas in which I have worked as a locum. But this does not preclude me from raising clinical issues should I feel the need. Examples of clinical interventions I have made include querying the use of a non cardioselective beta blocker (propranolol), and a selective one, atenolol, both of which should only be prescribed for people with asthma under consultant supervision.

My handwriting is appalling, so I type all my MURs. This takes time but it also means my recommendations are kept on computer and I can use or adapt them as necessary for future reviews. The new MUR form is an improvement in some respects.

Not all of my recommendations have been taken up by the GPs but, in general, responses have been favourable. For example, requests to prescribe a spacer device are usually acted on quickly. However, I take care to couch my recommendations in terms that are unlikely to raise anyone's hackles. I like to use the words: "I wonder if you would kindly . . ."

I have also found that MURs have provided the opportunity to raise the issue of generic and brand prescribing with GPs, for example, advising that Serevent can be changed to salmeterol with no loss of patient benefit, or, in contrast, that modified release theophylline and aminophylline should be prescribed by brand.

MURs have allowed me to spend more time with asthma patients and help them improve their understanding and control of their condition.

Our continuing professional development article this week gives an update on asthma management (see pp283–6).