



## Mixing up the medicine cabinet

*How to combine prescription, over-the-counter and herbal meds logically and safely*

BY MICHAEL ZITNEY, MD

There are several good reasons why you may want to offer your pain patients treatments that are alternative or complementary to prescription drugs. First of all, these days there's an increasing interest in alternative meds. Your patients are using them, and if you're judging them for it, they won't tell you what they're taking. This can lead to duplication and adverse reactions. Secondly, when treating chronic pain, we should use all the help we can get. Our patients' quality of life may well improve using a combination of approaches, and adjuvant treatments may allow us to use smaller doses of opioids. In fact, pain management is one area of medicine where polypharmacy is still favoured. Lastly, many of our patients, especially those with fibromyalgia spectrum illnesses, do poorly with prescription medications. These are the people who develop side effects to even the smallest doses; many do better on non-prescription and herbal treatment.

### **A vicious cycle**

I preface my first discussion with patients about treatment options with a few comments. Alternative medications may have less rigorous scientific evidence behind them,

and there may be issues of quality control and purity in manufacturing. Generally speaking, beneficial effects may take longer to occur, but side effects are fewer.

Patients rarely have chronic pain in isolation. Pain leads to disrupted sleep, and caffeine and other substances may be used to combat daytime sleepiness. More pain means less activity, translating into even worse sleep at night and a disruption of normal social patterns. Tissue damage can also alter normal biomechanics, resulting in compensatory muscle spasms. Secondary depression emerges when lack of stage 3 and 4 sleep, poor nutrition and excessive catecholamine release overwhelm the brain's ability to make the necessary neurotransmitters. Treating these coexisting conditions improves the patient's chance of satisfactory pain relief.

### **Treating sleep disturbances**

When diagnosing sleep abnormalities, it's useful to rule out apnea, periodic leg movement disorder

and other pathologies. Quite often, however, patients simply can't sleep due to pain. Try not to create other problems as you select a treatment. For example, while amitriptyline has the most evidence behind it as a pain killer, I prefer to use tricyclics with fewer side effects, such as desipramine and nortriptyline. After all, we want these patients to become less drowsy and more active.

There are non-prescription supplements that can be added to help achieve the deep restful sleep that our patients crave. Melatonin is now available at most health food stores and many pharmacies. It works well at 1.5-6 mg, especially in shift workers or travellers. If the patient sleeps well but is groggy in the morning, decrease the dose. Exposure to full spectrum light first thing in the morning will suppress melatonin (when we don't need it) and promote the normal diurnal rhythm.

Two other supplements, tryptophan and 5-hydroxytryptophan (5-HTP), are also useful for sleep.

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Both get converted into melatonin and should be taken 1-2 hours before bedtime. They also produce serotonin and will benefit depression. The recommended dose for 5-HTP is 50-200 mg. Use the lowest dose if the patient is on full doses of a selective serotonin reuptake inhibitor (SSRI) because there's a small but important risk of serotonin syndrome if large quantities of each are used. Tryptophan is available by prescription; 0.5-4 g should help and may be safer than 5-HTP when combined with SSRIs.

#### **Myofascial spasms are common**

Most pain patients have accompanying myofascial spasms. This may be due to a splinting effect as the body is trying to protect an injured area; it can also be a compensatory effect — surrounding muscles working extra hard to make up for the injured ones. To treat this, I often use a combination of a muscle relaxant with opioids. Cyclobenzaprine shares structural similarities with tricyclics and can be used in their place; a dose of 10-20 mg will enhance deep sleep and muscle relaxation. Tizanidine is a newer muscle relaxant that has important central (alpha-2 agonist) effects, is well tolerated and effective. Its use occasionally results in vivid, disturbing dreams — I suspect these patients are not used to reaching REM sleep. Use cautiously with hepatic impairment.

GABA is an amino acid that's active at the GABA receptors, and as such is a natural anxiolytic and secondary muscle relaxant. It's given in doses of 100-1,500 mg just before bed; the predominant side effect is drowsiness. Use lower doses in patients with low blood pressure. Mag-

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nesium, vitamin D and B-complex enhance muscle function and may be beneficial in chronic spasms.

#### **How to deal with depression**

There's a high incidence of depression in the chronic pain population. In my experience, if the pain gets better with treatment, the depression improves along with it. For this reason, I tend not to focus on the depression first. Be more aggressive if the depression interferes with the patient's compliance. I usually choose the antidepressant with the most desirable side effect profile. For example, if the patient complains of insomnia, mirtazapine may help. If a person's too lethargic, venlafaxine hydrochloride may be a better choice. It has the theoretical advantage of boosting more of the crucial brain neurotransmitters than most other SSRIs.

The two amino acids tryptophan and 5-HTP may also be useful. The latter is a naturally occurring

substance found in the seeds of *Griffonia simplicifolia*, an African plant; it increases the production of serotonin in the brain. Many of my patients find it extremely effective, but it tends to be expensive. Tryptophan was one of the most popular antidepressants

before fluoxetine hydrochloride. Both 5-HTP and tryptophan can be safely combined with small doses of a single SSRI, but with increasing doses or numbers of agents the risk of serotonin syndrome goes up.

#### **The role of opioids**

The use of opioids, especially the slow-release, long-acting formulations, has helped relieve suffering and improved the quality of life of many chronic pain patients. But opioids alone are usually not enough to break the chronic pain cycle, as they are not particularly effective at treating the coexisting conditions of insomnia, myofascial spasms and depression. Fortunately, there's a growing list of prescription, over-the-counter and herbal treatments that can be combined with opioids to address these problems and improve the patient's ability to deal with their pain. In this article, we've only touched on a few of the available options. Don't forget about exercise, warm water aquatherapy, meditation, acupuncture, omega-3s, glucosamine, arnica and many others. **PE**