

Once-daily skeletal muscle relaxant in SA

Myprocam (cyclobenzaprine extended release [ER] hydrochloride) is the most widely prescribed skeletal muscle relaxant in the US, is now available in SA. Myprocam's safety and efficacy has been shown in more than 20 clinical trials. It was recently launched by Adcock Ingram nationally, making SA the second country (only to the US) to bring the product to market.

Myprocam, indicated for the relief of muscle spasm associated with acute and painful musculoskeletal conditions, was previously only available in other countries in immediate release (IR) 5mg and 10mg formulations with three-times-a-day dosing. It is now available in 15mg and 30mg versions, as ER once-daily formulations. It is packaged in 30s, but could be prescribed in less quantity if preferred.

Dr Arnold Weil, who specialises in non-surgical orthopaedics and has been involved in many of the trials on cyclobenzaprine, was one of the international speakers at the launch event. He recently shared the following in an interview with *Medical Chronicle* Editor, Claire Smith.

1. What are the benefits of the extended-release formulation?

The ability for the patient to take one pill a day and get the full effect for 24 hours. This helps with patient compliance and efficacy of the medication, since the patient doesn't have to remember to take it three or four times a day to get the full effect.

2. Cyclobenzaprine is one of the most studied molecules in the world. What were some of the striking findings of the extended-release version trials that you were involved in?

It showed fewer adverse events than the TID dosing of the short-acting cyclobenzaprine, greater efficacy than placebo and was well tolerated by patients in the trials.

In clinical practice, this holds true. Patients have few side effects and the incidence of sedation is much less with the extended release Myprocam than the immediate release cyclobenzaprine. As a result, patients get much better relief of muscle spasm.

3. What patients are the best candidates for this product?

Patients with acute muscle spasm who require treatment in addition to physical therapy to help with musculoskeletal pain associated with muscle spasm. Almost every patient with acute back and neck pain has a component of muscle spasm. Patients

with spine-related disorders and other sports injuries are excellent candidates for Myprocam.

4. What are the common indications for which Myprocam is used, and what are the common causes of these ailments?

Low back pain, neck pain, sports injuries, muscle sprains and strains. Common causes of these conditions include sports injuries, car accidents, work-related injuries, and everyday activities, which account for acute orthopedic injuries.

5. Patients often take a range of drugs for pain. What other drugs can Myprocam be taken with?

Non-steroidal anti-inflammatory drugs and analgesic drugs.

6. What drug interactions should healthcare practitioners look out for?

Avoid Myprocam with tramadol use.

7. Are there any elements in a patient's history that should be red flags for prescribing Myprocam?

Use with caution in elderly patients, patients on beta blockers and patients with cardiac disease.

8. What are the classes of muscle relaxants?

Skeletal muscle relaxants (SMRs) are a group of structurally unrelated drugs, as shown in *Figure 1*. These are divided into two categories:

- **Antispasticity agents:** Used to treat muscle spasticity caused by traumatic neurologic injury, multiple sclerosis, and other conditions.

- **Antispasmodic agents:** Used to treat muscular pain or spasm associated with acute, nonspecific musculoskeletal conditions.

Cyclobenzaprine is the most commonly prescribed skeletal muscle relaxant in the US and has been shown to relieve muscle spasm without interfering with muscle function. It is structurally similar to tricyclic antidepressants and exhibits anticholinergic activity.

The ER formula was developed to maximise the clinical benefit of cyclobenzaprine and to increase tolerability. Cyclobenzaprine ER is the only once-daily skeletal muscle relaxant available and makes use of the Diffucaps® drug delivery technology.

The Diffucaps beads contained in each capsule consist of an inert (sugar) core in the centre surrounded by a layer of active drug (cyclobenzaprine),

a protective coating, and a polymer membrane that controls the rate of drug release.

The formulation of the drug ensures early systemic exposure to cyclobenzaprine, with a plasma concentration at four hours that is similar to that observed with cyclobenzaprine IR.

However, in contrast to the fluctuating peaks and troughs in plasma cyclobenzaprine concentration after administration of the IR formulation three times daily, plasma cyclobenzaprine concentration with the ER formulation is sustained over 24 hours following the administration of a single dose. **MC**



DR ARNOLD WEIL

