MANAGEMENT FILE

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the ME association
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Duloxetine/Cymbalta for fibromyalgic and neuropathic pain relief

WHAT IS DULOXETINE?

Duloxetine (trade name = Cymbalta) is a drug that has several uses. It is normally used to treat more severe cases of depression. But it is also sometimes used to treat a generalised anxiety disorder and for stress incontinence. It can also be helpful for pain relief.

Duloxetine acts by normalising an imbalance in two important brain chemical transmitters – noradrenaline and serotonin – that can occur in depression.

In relation to stress incontinence, this is often caused by a weakening of the pelvic floor muscles following childbirth. This results in episodes of incontinence following coughing, sneezing or exercise. Duloxetine (trade name here = Yentreve) is sometimes used to treat stress incontinence where pelvic floor exercises have failed to adequately help. The drug acts by helping the muscles around the bladder outlet to contract more strongly.

HOW DOES DULOXETINE HELP WITH PAIN?

As with other types of anti-depressant medication – low dose amitriptyline for example – duloxetine has been shown to help some people with pain, including both neuropathic/nerve pain and fibromyalgic pain.

Neuropathic pain is often described as a more severe or intense type of pain that is burning, shooting and stabbing and can keep people awake at night. Duloxetine can also be used to treat diabetic neuropathy, where nerve damage causes pain in diabetes.

In the case of pain relief, duloxetine may be acting by calming down parts of the central nervous system that are involved in the transmission and assessment of messages about pain and altering the way in which the brain responds to these messages about pain.

Fibromyalgia (FM) is a condition that has a number of overlapping symptoms with ME/CFS and produces tender spots in various specific places around the body – often on both sides in a symmetrical pattern. Some people with ME/CFS have what can be described as a fibromyalgic pain component to their illness and some doctors see no real difference between FM and ME/CFS. So there is a considerable degree of symptom and diagnostic overlap between FM and ME/CFS.

Consequently, where there is evidence that a drug can be a safe and effective option in FM, as is the case with duloxetine, it could also be of value for some people with ME/CFS. Like gabapentin and pregabalin, duloxetine is therefore an option for pain management that your doctor may decide to consider.

ARE THERE ANY CONTRA–INDICATIONS TO TAKING DULOXETINE?

Duloxetine should not be used, or only used with caution, in the following situations:

- pregnancy or breast feeding – as is the case with any antidepressant drug
- liver, kidney or heart problems, including high blood pressure
- glaucoma
- mania, mood swings or bipolar disorder
- seizures/fits
- blood disorder that increases the risk of bleeding

Duloxetine can interact with other drugs, including over-the-counter and alternative remedies such as St John's Wort, where it increases the risk of side-effects occurring.

ARE THERE SIDE–EFFECTS?

As with all antidepressants, duloxetine has side-effects, some of which are symptoms that are found in ME/CFS. So the side-effects profile clearly has to be taken into consideration when considering making use of this drug to manage pain.

Common side-effects can include headache, drowsiness, nausea, constipation, dizziness, blurred vision, and dry mouth.

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If it causes dizziness or sleepiness, do not drive or operate machinery.

- Nausea can be reduced by eating simple meals and avoiding spicy foods.
- A dry mouth can be eased by chewing sugar-free gum or sucking sugar-free sweets.
- Constipation can be reduced by drinking plenty of water and a cautious increase in fibre intake.

People who experience any form of depressing or distressing/suicidal thoughts whilst taking duloxetine **must** speak to their doctor as soon as possible.

Less common side-effects include muscle pains and twitchings, impaired temperature regulation, vertigo (spinning round sensations), loss of appetite, flushes, raised blood pressure, feeling anxious, feeling shaky, increased sweating and loss of interest in sex.

HOW IS IT TAKEN?

The drug is taken in capsule form, normally once a day at the same time. The capsules should be swallowed with a glass of water.

There are lower (20mg and 30mg) and higher (40mg and 60mg) strength capsules available. As people with ME/CFS are often very sensitive to drugs that act on brain chemical transmitter systems, it is sensible to start with a low dose and gradually increase the dose.

If a dose is forgotten, this should be taken as soon as possible. If it is missed until the following day do not take two doses together to compensate.

ARE THERE ANY OTHER CONSIDERATIONS OR WARNINGS?

As with any antidepressant drug, it may take a few weeks before any real benefits occur and start to build up. So it should not be abandoned after only a week or so because no obvious benefit has occurred.

Duloxetine should not be discontinued abruptly. There should be a gradual reduction in dose over several weeks to prevent withdrawal symptoms.

HAVE THERE BEEN ANY CLINICAL TRIALS TO ASSESS ITS USE IN FM AND ME/CFS?

A number of clinical trials have assessed the use of duloxetine in FM and a new study from Japan adds further support for its use as an option for treating fibromyalgic pain.

The Japanese clinical trial was a randomised, double-blind, placebo-controlled phase 3 study where one group of FM patients received duloxetine (n =196) and the other group (n=197) received a placebo.

The trial demonstrated a significant improvement in the change of average pain scores from baseline to week 14 and improvement in overall quality of life.

Duloxetine was generally well tolerated in this trial – with somnolence, nausea and constipation being the most common side-effects.

Reference:

Murakami M *et al.* A randomised, double-blind, placebo-controlled phase 3 trial of duloxetine in Japanese fibromyalgia patients. *Arthritis Research and Therapy,* 2015, 17, 224.

Full paper available here:

www.arthritis-research.com/content/17/1/224

In relation to ME/CFS, Arnold *et al* (see boxed abstract on the following page) have reported on a randomised, double blind trial that compared duloxetine with a placebo. While the drug had no significant effect on fatigue, there were benefits in relation to pain, mental fatigue and a global measure of severity. Duloxetine was generally well tolerated in this group of patients.

WHAT DO PATIENTS THINK OF IT?

As with any drug that is used in ME/CFS or fibromyalgia, there are numerous reports on internet forums – including MEA Facebook– from people who have been prescribed duloxetine. As is often the case, there are reports from people who have found this drug helpful, sometimes very helpful. Others have found duloxetine to be of no benefit or have discontinued it due to side-effects. A small number report that they have been made significantly worse after taking this drug.

CONCLUSION

This is a drug treatment option that could be considered for some people who have a diagnosis of FM, or in the case of ME/CFS where there is a fibromyalgic or neuropathic component to pain, especially if there is significant co-existent clinical depression that requires drug treatment as well.

Further clinical trials would be useful to obtain a better guide as to which people with ME/CFS might benefit and which do not.

Abstract from ME/CFS clinical trial carried out by Arnold LM et al:

Psychosomatics. 2015 May-Jun; 56(3): 242-53.

A randomized, placebo-controlled, double-blinded trial of duloxetine in the treatment of general fatigue in patients with chronic fatigue syndrome.

OBJECTIVE

To assess the efficacy and safety of duloxetine in patients with chronic fatigue syndrome.

METHODS

A 12-week, randomised, double-blind study was designed to compare duloxetine 60-120 mg/d (n = 30) with placebo (n = 30) for efficacy and safety in the treatment of patients with chronic fatigue syndrome.

The primary outcome measure was the MultiDimensional Fatigue Inventory general fatigue subscale (range: 4-20, with higher scores indicating greater fatigue). Secondary measures were the remaining Multi-Dimensional Fatigue Inventory sub-scales, Brief Pain Inventory, Medical Outcomes Study Short Form-36, Hospital Anxiety and Depression Scale, Centers for Disease Control and Prevention Symptom Inventory, Patient Global Impression of Improvement, and Clinical Global Impression of Severity.

RESULTS

The improvement in the Multi-Dimensional Fatigue Inventory general fatigue scores for the duloxetine group was not significantly greater than for the placebo group (P = 0.23; estimated difference between groups at week 12 = -1.0 [95% CI: -2.8, 0.7]).

The duloxetine group was significantly superior to the placebo group on the MultiDimensional Fatigue Inventory mental fatigue score, Brief Pain Inventory average pain severity and interference scores, Short Form-36 bodily pain domain, and Clinical Global Impression of Severity score. Duloxetine was generally well tolerated.

CONCLUSION

T*he primary efficacy measure of general fatigue did not significantly improve with duloxetine when compared with placebo.*

Significant improvement in secondary measures of mental fatigue, pain, and global measure of severity suggests that duloxetine may be efficacious for some chronic fatigue syndrome symptom domains, but larger controlled trials are needed to confirm these results.

ME Essential, our quarterly membership magazine

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2-4pm and 7-9pm

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