

An Open Label Dose Escalation Study of Mexiletine in Cervical Dystonia and Essential Blepharospasm

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Mexiletine, a lidocaine derivative used originally for cardiac dysrhythmia, more recently for painful peripheral neuropathy, has most recently been reported from Japan to be effective in reducing both spasm and pain of cervical dystonia (CD) and spasm in blepharospasm (BEB) (Ohara et al, Neurology 48:Suppl 2:A398-399, 1997).

This report is from an open label dose escalation study of mexiletine in U.S. patients with idiopathic CD three with and seven without prior selective denervation surgery and two unoperated BEB. Two patients (one CD and one BEB) had never received botulinum toxin A therapy. Criteria for entry included: No history of 'caine sensitivity, normal ECG, no history of myocardial infarction, signed informed consent, baseline TWSTRS severity score ≥ 10 of a possible 35, pain score ≥ 6 of 20, AIMS severity score > 6 of 10, total ≥ 10 of 42. The oral dosage escalation was from 150 mg q.d. to t.i.d. by four weeks and up to 400 mg t.i.d. by eight weeks with patient contacts at weeks two, four, six and eight. Patients were permitted to extend treatment to 12 weeks.

Two patients have completed eight weeks of therapy, four at four weeks, and six and two weeks. One additional patient was rejected from initiating the study because of preexisting cardiac disease. One operated CD patient discontinued therapy at three days because of nausea and dizziness at 150 mg per day. All study patients reported subjective reduction in pain and spasm by week two. All patients reported at least 25% reduction in TWSTRS pain score at two weeks of therapy (150 mg t.i.d.). One of the two BEB patients had a 50% reduction in spasm on AIMS, two of five CD patients had a 25% or more reduction in TWSTRS severity by four weeks (150 mg t.i.d.) at which point drug levels were two-thirds to three-fourths of therapeutic cardiac effect.

Although the frequency of side effects may make a placebo-controlled study difficult, these data suggest a blinded placebo-controlled study is worth attempting to clarify the therapeutic effects of mexiletine in dystonic pain and spasm.

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