

A focal dystonia model for subsets of chronic tension headache

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INTRODUCTION: Focal dystonias are centrally driven disorders that share common characteristics including involuntary tonic muscle activity, local myogenous pain and temporary relief with a sensory trick. It has been suggested that myogenous activity is an integral part of tension-type headaches. The pain associated with these headaches can often be relieved on a temporary basis by rubbing or stimulating patient specific areas of the scalp or neck.

OBJECTIVE: To examine correlations between the response of subjects with chronic tension type headaches (TH) and those treated for focal head and neck dystonias using Botulinum toxin type A (BTX-A) which produces prolonged muscle relaxation.

METHODS: This retrospective study examined 21 subjects with chronic TH (by IASP definition) with palpable muscle tenderness of the scalp or upper neck, and headache pain at least 4 times per week over the previous month. Subjects were injected with 100 units of BTX-A (as Allergan Botox[®]), in 1 ml. of saline evenly divided over five injection sites representing the most tender muscle points to palpation in the scalp and upper neck area. Outcome measures included muscle tenderness on palpation, and headache frequency. Data was collected at 4 weeks post injection.

RESULTS: Of the 21 TH subjects, 18 responded with at least a 50% reduction in the frequency of headache and 20 responded with a 50% reduction in tenderness to palpation.

DISCUSSION: These results correlate well with respect to response rate, reduction in myogenous pain and reduced pain frequency when compared to dystonias treated with BTX-A. Considering the possibility that some chronic headaches may be variants of focal dystonias, may ultimately provide new insight into their management.