Reviewer's report

Title: Improvement of chronic facial pain and facial dyskinesia following botulinum toxin application.

Version: 1 Date: 4 September 2006

Reviewer: GE Borodic

Reviewer’s report:

The manuscript entitled “Improvement of chronic facial pain and dyskinesia following botulinum toxin application” is a case report of a post dental extraction facial neuropathy associated with elements of dyskinesia. In the reviewer’s experience, the syndrome of post dental extraction neuropathy can be incapacitating and very difficult to treat. The usual groups of medications include topical anesthetic combinations, various antidepressants, anti-seizure medications often fail to control the pain as the problem become chronic as occurred in the case reported. In my combined experience of over 250 cases of non-migrainous facial pain, the post dental extraction syndrome represents only a very small subcategory with less than 10 patients, all without dyskinesia. About 50% of the patient in this group received any initial benefit from botulinum injections and fewer received sustained relief after several years of repeated injections. The experience with other post surgical firms of facial pain in larger patient sample (>80 cases) were much better with over 80% receiving initial benefit and over 60% receiving sustained benefit over 18 months. These cases included post sinus surgery pain syndromes, post craniotomy pain syndromes, and pain syndromes associated with other soft tissue procedures of the head and neck region. The presence of dyskinesia (involuntary movement) co-existing with the chronic pain in the case reported is a strong positive predictive factor for a beneficial pain response and the authors appropriately and effectively implemented botulinum toxin treatment.

The reader should be cautioned that neither reproducible controlled trials on application of botulinum toxin for various forms of headache to date have not been established nor has the mechanism of action for pain application been solidly proven. Although anti-inflammatory properties have been reproduced from for some applications, these effects may be secondary and not necessarily the primary effect. For these reasons, the application of botulinum toxin for chronic facial pain (without dyskinesia) should be reserved for those cases where conventional therapy proves ineffective and the symptoms are severe. Although the scientific basis proving efficacy has not been decisively proved for these cases, the risk to the patient is minimal.

Gary E Borodic, MD
August 2006

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Quality of written English: Needs some language corrections before being published