Guest Editorial

Intricate correlation of usage of Botox in Dentistry; Some Convincing Facts

This article may be cited as: Singh K. Intricate correlation of usage of Botox in Dentistry; Some Convincing Facts. J Adv Med Dent Scie 2013;2(1):3-4.

Dentists are trusted to give patients a shot of local anesthetic before a cavity filling or a root canal. But should they be allowed to administer Botox injections? What has Botox got to do with dentistry? And how can it possibly have any relationship to our patients' health? Why should dentists be involved in providing it? So, as the questions increase about the use of Botox in dentistry, clinicians must restrict the use of such Botox based preparations within the scope of dental practice. Botox has become the most popular minimally invasive cosmetic procedure in the country, numbering 2.6 million in the United States in 2011, according to the American Society for Aesthetic Plastic Surgery.[1] Scientifically, botox is commercial preparations of botulinum toxin derived from the bacterium Clostridium botulinum, a nerve "blocker" that binds to the nerves and prevents the release of acetylcholine, a neurotransmitter. From a treatment planning viewpoint, it must be accepted that many of our patients are having facial esthetic procedures performed somewhere, whether or not we provide them with it ourselves, or even if we approve of it personally. Conversely, therapeutic treatment with Botox for such conditions as tempero-mandibular disorders may have unplanned esthetic outcomes. For the same, an understanding of what Botox does and how it works is deemed necessary.[2]

BOTOX decreases the muscle activity by blocking overactive nerve impulses that trigger excessive muscular contractions by selectively preventing the release of the neurotransmitter acetylcholine (ACh) at the neuromuscular junction. Presurgical BOTOX therapy also play a key role in attaining muscular relaxation during surgical repair of multiple maxillofacial fractures associated with road traffic accident. Inappropriately attended hypertonic peri-traumatic musculature may lead to impedance of formation of callus. Excessive forces created by para-functional clenching impede healing and reattachment of gums and bone in the mouth following trauma. Small doses of BOTOX may possibly limit the para-functional clenching while higher doses can be used as a injectable placebo limiting extreme muscular contraction. [3]

In spite of several controversies, BOTOX therapy is a conventional, non invasive and presurgical treatment that weakens the injected muscle but leaves the other muscles unaffected. The procedures are trouble-free to complete by general dental practitioners, prosthodontists and cosmetic surgeons with suitable instructions and guidelines. Our patients deserve better! Perhaps it is time for dentists to evolve some legs, get on the bicycle and join the ride. Who knows what we may learn along the way or what may wait at the finish line!

References

1. Romero M. Top Dentists 2013: Should Dentists Inject Botox? Available from URL; http://www.washingtonian.com/articles/health/top-dentists-2013-should-dentists-inject-botox/ [Last accessed March 15, 2014]
2. Rosania AE, Low KG, McCormck CM, Rosania DA. Stress, depression, cortisol, and periodontal disease. J Periodontal 2009;80:260-6.
3. Lewis MB, Bowler PJ. Botulinum toxin cosmetic therapy correlates with a more positive mood. J Cosmetic Dermatology 2009;8:24-6.
4. Finzi E, Wasserman E. Treatment of depression with botulinum toxin A: a case series. Dermotol Surg 2006;32:645-60.

Dr. Kishan Singh

Principal, Professor and Head, Department of Prosthodontics,

Shree Bankey Bihari Dental College and Research Centre,

Ghaziabad, India