## The history of Botox® in dentistry

Everyone knows that Botox® is very effective for eliminating facial wrinkles. This powerful muscle relaxant is very effective in the muscles of the face and head. Did you know that many of the treatments using Botox® for the face, mouth, gums and teeth were developed by a South African dentist living in San Diego? And that the discoveries were made while trying to use another drug that this ingenious dentist invented?

In 1999 Dr Howard Katz postulated that if he would reverse the effects of epinephrine in local anesthetic then the rapid perfusion of blood would wash away the anesthetic. Pilot studies performed in his private dental office in San Diego were incredibly successful. His agent of choice was stabilized phentolamine, an Alpha adrenergic receptor (epinephrine) antagonist to rinse away local anesthetic and rapidly reverse the effects of local anesthetic in the mouth. In effect he had invented dentistry's Holy Grail - the first truly effective local anesthetic reversal agent. After using this concoction patients would no longer have to endure hours of incapacitation and embarrassment associated with a dental infiltration or mandibular block.

Dr Katz's general practice in San Diego attracted many patients with extracapsular myogenic TMD. He realized that that predominant cause of many myogenic conditions was parafunctional or dystonic clenching. He had an ethical problem treating these patients with aggressive dental treatments like full mouth rehabilitations – especially when treating a transient muscular problem. Many of his patients had been prescribed splints which they seldom wore. He injected his phenolamine concoction into the cramping jaw muscles in the hope that the rapid perfusion of blood would relax the muscle spasm. He found the treatment was very effective - but for a very short period of time. Research into systemic longer acting muscle relaxants including flexeril and tricyclic antidepressant drugs showed that there was some relief but at a very expensive price paid with horrific side-effects. When he looked at the effects of the Botulinum neurotoxins on parafunctional clenching and the related intra-oral pathology he found that no specific research had been done. Over the next few years Dr Katz created the original effective protocols using Botox® for these conditions. Allergan, the owner of Boto®) licensed Dr Katz's original patented protocols for the treatment of these and many other facial conditions.

Around that time research was being done in the use of Botox® for migraine. This treatment was only partially effective when there was an extracranial myogenic component in the initial phases of the migraine. Dr Katz originated the effective protocols for combining a disclussional device like a Lucia Jig or an NTI to be used in combination with Botox®. He recommended changes to the sites and doses of Botox® injected into the pericranial and masticatory musculature. The current Botox® injection protocols resemble Dr Katz's recommendations more than the original. With his knowledge of dentistry and pharmacology many doctors and patients from around the world seek advice and find relief where many neurologists, physicians and dentists have failed.

Today Dr Katz teaches physicians and dentists around the world under the umbrella company Dentox Inc how to treat these conditions. Dr Katz and Dentox really have trained and treated more dentists and dental patients than anyone else in the world. Although having lectured for many pharmaceutical companies he is unbiased and sees the world through the eyes of a wet fingered cosmetic dentist. His knowledge on the dental and cosmetic applications and how to legally use his and other protocols in the dental office are unsurpassed.

There are many Dr Katz wannabee's who claim his knowledge, experience and originality. Don't waste your time and money attending any other programs...especially when you have Dr Katz in your own back yard.