Yoga and Dentistry

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Competitive environments, fear, guilt, anxiety, restlessness, anger, disorganization, bills, unemployment, poor sleep, etc. are factors that usually cause emotional stress. Related to these factors are several systemic and oral diseases, such as noncarious lesions (abfraction, erosion, abrasion, wear), periodontitis, xerostomia, burning mouth syndrome, autoimmune diseases (e.g. oral lichen planus) and cancer that might by triggered by the immunological disturbance that is caused by continuous persistent and no-functional stress.



Body Alarm

When we are alert, teeth grinding or clenching do not exceed 80 kg/Force. However, in sleep, the force applied can be up to incredible 300 or 400 kg/F. The periodontal ligaments, bone, tooth structure, muscles, articular disc and gums end up overloaded and subsequently injured by this over-exertion. After a night with grinding or dealing with our bruxism, we wake up tired, tensed and in pain. Our body has the best alarm system in the world, however we misuse it. It is as if in the middle of the night, our alarm rang it might be burglars breaking in, an earthquake, an accident—but instead of checking it out you simply turn off the alarm and go back to sleep. Unfortunately this is what we do most of the time when we experience illness or pain and we just



take a few medications instead of seriously dealing with the underlying causes and not simply the symptoms. We carry on like that until the day when the painkiller no longer kills the pain and we move on to stronger drugs, antibiotics or other substances.

We would grind away our tooth substance or occlusal plane, our articular structures. We also might lose the occlusion we had, a basic key to body statics, with fatal outcome.

Moreover, the increased and intensified function of the central nervous system (CNS) during stress causes among others xerostomia which in extreme cases might cause dysphagia, swallowing difficulties and dehydration as well as multiple teeth decays and toothache. In this way xerostomia is capable of jeopardizing the quality of life of the person and indirectly can lead to the stress inducement. Last but not least the multilevel and multistep carcinogenesis process always includes stress either as one of the indirect causing factors mostly due to the immunological weakness that it causes or as a leading promoting factor as it induces several molecular pathological reactions.

Break out with Yoga

To break free of this cycle and get to the real causes, we must embark on a long journey of self-knowledge. The lack of awareness or perception of the surround-





Fig. 1 and 2: Non-caries lesions.

ing reality makes us loose touch with ourselves, and leads to emotional stress. We are always looking for something else, but not always do we know what we want or how to get it. To get you out of this trap, there is Yoga. Yoga, dating back to 5,000 years before Christ, is a physical and mental activity aimed at achieving self-knowledge, revealing our inner essence, fostering union with the Divine, and the cosmic consciousness.

Yoga comes from the sanscritic word "yuj" that means link, unite and although there are 5–7 branches of Yoga in the West, the most widely practiced being Hatha Yoga. Hatha Yoga is synthesized by two syllables: "ha" that means sun and "tha" which means moon. Therefore literally Hatha Yoga means the sun-moon union but it actual refers to the harmonic coexistence of all opposite forces of the universe such as light & darkness, sky & earth, day & night, female & male, completeness & emptiness. Hatha Yoga consists of stretching practices called Asanas, like the "Dog" or the "Cobra". The idea of practicing Asanas was originally to stretch for the meditation. These positions like the "Lotus-position" demand flexible muscles, Asanas prepare for the meditation and are also a good way of practicing sports.

What it does

Yoga boosts body and mind awareness, and helps us notice what is good and bad for us, what we really like, or how we react to certain situations. Yoga expands thought and concentration, helps to focus, change habits, and boosts self-esteem. The physical effects are also very important: strengthens and stretches body muscles, improves fitness, oxygenates the body and brain, delivers an anti-stress effect, and boosts cardio-respiratory capacity. Breathing exercises release hormones that relax and dissipate tension, causing a feeling of well-being. The benefits of Yoga greatly contribute to preventive dentistry and oral medicine. Practicing Yoga also helps to focus on ourselves and to forget about the problems and worries that we have. For this it is very helpful to focus on the breathing, which is usually not forced, but monitored by our selves. Besides that as breathing is the source of life, one who gets control of his/her own breathing attitude literally takes control over life itself!

Meditation

New studies show that meditation changes the brain structures and develops resistant against stress. When people practice meditation, they more easily learn how to go into themselves, to stop thinking and listen to their body.

The outcome

When stress levels fall, teeth clenching is milder and there are fewer non-carious and oral diseases. Expanding our body awareness, we will notice teeth clenching, bruxism, we won't brush as hard thus reducing abrasion. Strengthening abdominal muscles, in many cases, will reduce gastric reflux that is one of the causes of erosion. The inverted poses change our vantage point in life and help us to find new solutions, in addition to reducing stress. The exercise in patience, concentration and discipline helps in to change eating and hygiene habits, such as introducing daily flossing. Perhaps the key benefit of Yoga is a greater perception of life, it leads into a change of habits and behaviors, and significantly improves the quality of life.

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