

## Why I love Orthodontics



**Fabio SAVASTANO MD, DDS,**  
Spec.Orth, Professor, Editor

Dear readers,

Many of my friends who are dentists believe that Orthodontics is boring and repetitive. I have thought a lot about this general idea that dentists have towards my specialty, and I cannot totally blame them. Generally speaking, I have to admit that, if I had to perform orthodontics “by the book,” my specialty would probably be more than boring to me. Taking impressions, categorizing the occlusion and growth pattern and applying a fixed appliance involves waiting months to see results and then worrying for relapse and retention compliance. In addition, you have to cope with every single mother and father requesting endless explanations and selfish kids that do not bother with oral hygiene. An Inferno.

On the other hand, dentists are living a very interesting and passionate part of their profession: implants and advancements in surgical techniques, Cad-Cam and 3D, just to name a few. Not that this progress in techniques and biomaterials is not important, but is it not the same dentistry we’ve done for years?

In a society where you feel the pressure of delivering fast results, you often become a victim of this absurd system and forget the unicity of your profession to become just an executer of teeth alignment. Your main goal is a distorted idea of success: aligning teeth fast, making the patient’s parents happy and making money. I cannot say that these should not be some of the objectives in our line of practice, but I think there is more than this to *any* profession. If you take a closer look at what type of orthodontic courses sell the most, you will see that these courses advocate the use of new appliances, invented to deliver faster results with less patient compliance. No matter how deep your search is, you will always see fewer courses based on orthodontic diagnosis. So, what should be defined as *success* in Orthodontic Treatment?

I think success in orthodontic treatment is not what you deliver at the end of treatment, but what can be delivered for the upcoming years: the stability and conservation of TMJ function. This is a common point that both dentists and orthodontists have; we should practice delivering a functional occlusion as our main objective. Gnathology has benefitted from several advancements in technology, and this has opened a door previously closed to many dentists that can now objectively diagnose occlusion with ease. It has never been a better year to start a gnathology class: courses around the globe are increasing because there is more awareness among dentists about occlusion, TMJ problems, and sleep disorders. Think about CBCT which is now present in many dental offices. What about electromyography and

occlusion analyzers that were very seldom seen until just ten years or so ago. These are just a few examples that have and are changing the dental profession.

For many, occlusion remains a myth. The general opinion about occlusion is that it is related to TMJ function. Despite this, the literature is full of publications that state that occlusal rehabilitation and orthodontic treatment does not cause any problems to the TMJ. The literature lacks publications that link the treatment of the occlusion with TMJ disease. While this is great news for us, it is quite sad for our patients. It is sad for an important reason: in a way it justifies the conscious ignorance of some dentists in not worrying about the TMJ, on the other hand it enforces the right to practice any doubtful dental or orthodontic procedure because it will not cause TMD. So, you could be closing your eyes when finishing an occlusion but be willing to apply a “bite” for TMJ related problems. On the one hand, you hope to treat the TMJ by applying a bite, trying to unlink the patient’s occlusion, on the other hand, you are not willing to determine a correct functional occlusion that could avoid occlusal problems after treatment. This is a contradiction.

I’ve been practicing orthodontics for over 30 years, 29 of which involved applying the neuromuscular principals taught by Bernard Jankelson [1-7] to orthodontic diagnosis. Mandibular Tracking, electromyography, and TENS have all been in my office ever since. This has been a great opportunity for me; I have been able to see and measure the physiology of my patients. I am one of the lucky ones that did less investing in cosmetic appliances and more investing in knowledge. That myth about occlusion has been translated to a paradigm with continuous discoveries and its application in treatment protocols. I have been able to reduce relapse (every orthodontist has relapse cases, just in case you smiled) and find new therapeutic strategies [8-10]. I have had a chance to work with doctors around the world that are part of a growing neuromuscular community, who have stimulated me and with whom I share and confront my opinions and results. I have had a chance to really focus on my final occlusion. It has been a long journey and I do not regret one single moment.

I love orthodontics for many reasons. I think it will be the most important dental specialty in the future. Orthodontics is the specialty of specialties, meaning that orthodontists can help in periodontal patients, prosthetic, and surgical cases. The orthodontist probably remains the best candidate to treat occlusal problems and related TMJ symptoms. Orthodontists are patient and are happy to wait for results, and unless they become victim of the system, they will achieve an optimal occlusion for the patient. I love orthodontics because it has given me a chance to express my artistic side. *Ars Medica*: it is the creativity you put into crafting a balanced functional occlusion that is exciting and stimulating. Every case is a unique challenge and is different from the previous.

The neuromuscular approach gives the dental community the opportunity to free itself from old misconceptions that are deeply rooted in our profession. We need a wider perspective on occlusion and most of all we need to stop shouting out opinions while we have instruments we could measure them with. We need to try Neuromuscular Dentistry because we know deep inside that muscles are the engine that drives the stomatognathic system. Muscles, nerves, and fascia are all taken into consideration during neuromuscular dental diagnosis. We need to stop this purely technical and mechanistic approach to dentistry and leave more space for physiology, function, and occlusion.

Fabio Savastano, MD, DDS, M.Orth  
Adjunct Professor, Masters in Neuromuscular Orthodontics,  
University Jaume I, Castellon, Spain

Editor

1. Jankelson RR. Neuromuscular dental diagnosis and treatment. St. Louis: Ishiyaku EuroAmerica; 1990 in *Am J Orthod Dentofacial Orthop* (AJO-DO). 1991;99(3):283-284.
2. Jankelson B. Neuromuscular aspects of occlusion. Effects of occlusal position on the physiology and dysfunction of the mandibular musculature. *Dent Clin North Am*. 1979;23(2):157-168.
3. Jankelson B. Physiology of human dental occlusion. *J Am Dent Assoc*. 1955;50(6):664-680.
4. Jankelson B, Hoffman GM, Hendron JA Jr. The physiology of the stomatognathic system. *J Am Dent Assoc*. 1952;46(4):375-386.
5. Constantinescu MV, Traistaru T. [The concept of neuromuscular occlusion. II. The apparatus and its function]. *Rev Chir Oncol Radiol O R L Oftalmol Stomatol Ser Stomatol*. 1984;31(3):193-198.
6. Ene L, Constantinescu MV, Traistaru T. [The neuromuscular occlusion concept. III. Myofunctional impressions in completely edentulous denture arches]. *Rev Chir Oncol Radiol O R L Oftalmol Stomatol Ser Stomatol*. 1985;32(1):35-48.
7. Monaco A, Cattaneo R, Ortu E, Constantinescu MV, Pietropaoli D. Sensory trigeminal ULF-TENS stimulation reduces HRV response to experimentally induced arithmetic stress: A randomized clinical trial. *Physiol Behav*. 2017;173:209-215.
8. Savastano F. Correction of a Class II Occlusion in an Adult. *J Dent Oral Disord Ther*. 2014; 4: 1-10.
9. Savastano F. Applying neuromuscular techniques in the orthodontic setting. *South Eur J Orthod Dentfac Res.*, 2017. 4: p. 20-31.
10. Savastano F. Contemporary Dental Occlusion in Orthodontics. *BAOJ Dentistry*. 2015; 1(1):p.1-4.

DOI: [https://doi.org/10.25241/stomaeduj.2019.6\(2\).edit.2](https://doi.org/10.25241/stomaeduj.2019.6(2).edit.2)