‘Smile’ is everywhere – where is the occlusion?

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Is a smile nowadays a synonym for aligner orthodontics or is aligner orthodontics a synonym for a smile? Most aligner companies put the aesthetic smile in the foreground. Most lectures at aligner congresses deal with a smile. If you search for orthodontics on the internet you will find “smile”. In fact, a smile is important in orthodontics, and all over the world patients ask for a nice smile at the end of the treatment. Therefore, it is necessary to publish articles that deal with dentofacial aesthetics.

The question must be made, however, as to whether this preoccupation with aesthetics is everything. What is the benefit of a smile without function? Or, on the other hand, what happens if a smile is improved, but the function is lost?

This is why we start with the topic “function and occlusion” in this issue. First of all we should know if a functional disorder exists before orthodontic treatment begins. The published short screening test is a gold standard in diagnosis of the craniomandibular system and is practicable in daily practice.

It is very risky not knowing about potentially existing pathologies in the functional system and such diagnostic findings should therefore be well documented. The functional diagnostic should not only be performed in adults, but also in children – and this is confirmed by several published studies.

More articles will follow in future issues of the JAO to outline specific diagnostic procedures in orthodontics and orthopaedics, treatment planning and aligner orthodontic treatment in relation to function and occlusion.

“Occlusion is not everything, but everything is nothing without occlusion” – a citation of Professor Dr A Gutowski following Schopenhauer.

In the journal it is our special concern to outline a solid, scientific-based diagnosis, treatment planning and aligner orthodontics from a functional and an aesthetic point of view.

Let’s take care of the entire patient. Only then are we non-interchangeable. With “deep learning”, meaning algorithms programming themselves in order to repair their weakness and “big data”, i.e. computers browsing and structuring huge amounts of data, will the algorithms repeatedly improve. Companies want to replace us by algorithms and this will happen increasingly in the future. Certainly a smile can be designed digitally, but does the patient want a standard smile and fit this to his personality? The digital process can help us to plan the treatment and in the future orthodontics will be unthinkable without digital techniques. Nevertheless, the personal contact of the doctor with the patient, the personal anamnesis, and, most importantly, the manual diagnosis of the patient is a condition *sine qua non* to treat a patient as an individual.

The directed motility is controlled by the frontal cortex and at the same millisecond by the limbic system. Function is also 100% controlled by the limbic system. Emotion plays a huge role in the function of the craniomandibular and the musculoskeletal system. Function is more than a binary code. Artificial intelligence is strictly logical, quick and methodical, but emotionless.

We look forward to an aligner future, that includes the need for humans, including the orthodontist.