registration of the computerized dynamic analysis. In both cases the test was conducted in open eyes state.

Results: After the application of the Herbst orthodontic appliance, we immediately obtained a rebalancing of the postural position, an improvement in the postural loads and repositioning of the center of the gravity in a balanced position. Particularly, the load on the right foot is changed from 45 kg (before the application of the Herbst appliance) to 43,9 kg after the application of the appliance. while the load on the right heel changed from 17kg to 14,7kg. and the total torsion of the patient changes from 4,27 ° to 2,82°.

Conclusion: The postural monitoring of the orthodontic case falls within the essential tests of orthodontics. After the execution of the basic exams that are necessary for the therapy that is personalized for each patient, other physiologic dynamics must be monitored which are related to each other.

In conclusion, in this specific case we noticed that the application of an Herbst type orthodontic appliance has improved the balance, the weight loads and the position of the patient's gravity center.

Electromyography in patients affected by Juvenile Idiopathic Arthritis (JIA): the role of neuromuscular system un the protection of the temporomandibular articulation

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Aim: The aim of this study is to evaluate the motorial model and to understand the role of the neuromuscular system in the protection of the temporomandibular articulation in patients affected by Juvenile Idiopathic Arthritis (JIA) with also articulation disorders.

Methods: 20 patients with Juvenile Idiopathic Arthritis (JIA) were enrolled, these patients suffer from pathology on the temporomandibular articulation. It has been made an evaluation of the motorial function of the masseter muscle and temporal muscle. This evaluation is done through standardized Electromyography (EMG) and by using a software DAQ to analyze the results. The registrations were performed placing the patient in a sitting position, through the use of bipolar electrodes pregelled in Ag/Ag Cl. The test included a measurement in a maximum clenching and a measurement in occlusion on cotton rolls (cot) to determine the coefficient Percentage Overplaning Coefficient (POC). The obtained (POC) coefficient allowed the evaluation of the articular symmetry during muscle activation. Furthermore, the two measurements allowed to get other indices, which are; The asymmetry Index, Index of activation, index of twist, Index of impact,

Results: From the study we notice that 18/20 of patients affected by Juvenile Idiopathic Arthritis (JIA) present hyperactivity of the temporal muscle and consequently Hypoactivity of the masseter muscle, which is a symptom of not correct neuromuscular balance. It is been registered a negative sign about the index of activation in 18 cases. This value of negative sign means that a greater differential recruitment of temporal muscles is involved during the motorial activity of maximum clenching; the difference is about 10%.

Conclusion: In the 90 % of patients with Juvenile Idiopathic Arthritis (JIA) who suffer from articular disorder, it has been registered an adaptive response of protection to the temporomandibular articulation with an hyperactivity of the temporal muscles and/or the hypoactivity of the masseter muscle. From this study emerges, the importance of the evaluation of the motorial activity and the role of the neuromuscular system in the protection of the temporomandibular articulation, through the electromyographic test in maximum clenching.

Clinical, aesthetic and phonetic analysis on three patients

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Aim: Ghost® is a new aligner designed by Professor Giuseppe Siciliani, Chairman of "Postgraduate School of Orthodontics", University of Ferrara. We created a device that could respect the aesthetic needs of patients by adding on the buccal side of the aligner six composite veneers, on anterior teeth, thus permitting to enhance the aesthetic presence of the device, bypassing psychosocial uneasiness of anterior teeth alignment. This research aimed to evaluate the efficacy of Ghost® performing intrusion, rotation, tipping and alignment movements. We also evaluated its performance in the following scopes: aesthetic (its ability to remain "hidden" inside the oral cavity), phonetic (difficulties in performing spoken language), clinical (the discrepancy between dental movements that we initially established with setup and dental movements we obtained).

Methods: Ghost® is a polyurethane inert and rigid thermoformed-aligner. It was a single aligner used