

WHY THE PATIENT SUCKS THE THUMB? COULD SUCKING HABIT INFLUENCE NEUROMUSCULAR FUNCTIONS AND POSTURE?

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Aims: Sucking habit is a behaviour that has not find yet a univocal interpretation. The more accredited theory is the one that associates sucking habit act as an attempt to settle unbalanced muscular chains. The effects of sucking habit has been studied for the damages it can cause on the development of upper dental arch and for the palate constriction caused by hyperactivity of buccinators muscles. The aim of this study is to investigate the effects of sucking habit on orofacial musculature and on balance and posture and try to explain why children suck.

Methods: Forty subjects with abnormal swallowing and sucking habit history were compared to twenty healthy subjects. Subjects underwent: swallowing assessment through Payne Fluorescine method; closed eyes stabilometric trials (normal condition, with tongue placed on palatine spot and during thumb sucking act); static baropodometry and surface EMG of anterior temporal, masseter, sternocleidomastoideus, trapezius, paravertebralis and latissimus dorsi muscles under same conditions.

Results: Stabilometric results showed no significant changes within conditions in control group, while sucking habit subjects presented two different behaviours: subjects with no anatomical constrains (short frenum, ankylotic tongue) showed a significant reduction of parameters during thumb sucking trials. EMG showed balanced muscular values and reduced hypertone when patients put tongue or thumb on palatine spot.

Conclusions: These findings suggest that the fundamental element for muscular comfort is the regulating function exerted by trigeminal receptors on palatine spot. Results tend to interpret sucking habit by a neurological and neuromuscular, rather than psychological, point of view.