

EMG activity of the orbicularis oris and mentalis muscles in children with malocclusion, incompetent lips and atypical swallowing--part II.

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The EMG activity of the orbicularis oris (upper and lower), and of the mentalis muscles was verified during several movements of the lips, in 18 children ageing from 8 to 12 years, divided into three groups: one with normal occlusion, and two with class II division 1, with atypical swallowing and/or incompetent lips and who had received no orthodontic treatment. In blowing through a straw the muscular activity of the orbicularis oris and the mentalis was significantly greater in the incompetent lips group. The mentalis presented moderate activity in the competent lips group and negligible in normal occlusion. In puffing out of the cheeks, the malocclusion groups developed marked activity of the orbicularis oris and very marked activity of the mentalis, while the normal occlusion presented moderate and negligible activities, respectively. In pursing of the lips, only the incompetent lips group presented a very marked activity of the lower segment. The compression of the lips against the teeth revealed a marked activity of the upper segment of the orbicularis oris in the groups of malocclusion and the mentalis presented greater activity in the competent lips group. The reciprocal compression of the lips presented a hyperactivity of the three muscles.

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