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THE EFFECT OF UNILATERAL FUNCTIONAL DISTURBANCES WITHIN THE MASTICATORY SYSTEM ON THE MASSETER AND ANTERIOR TEMPORALIS MUSCLES

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ABSTRACT

Unilateral masticatory disturbances that force any individual to utilize one side in mastication due to avoidance conditioning are a common daily finding in dental practice. Our purpose in this study was to assess changes that occur in the muscles of mastication particularly masseter and temporalis muscles bilaterally in patients with unilateral functional disturbances using surface electromyography (EMG). It was shown that in unilateral mastication the ipsilateral muscles (working side) produced most of the work. Higher electromyographic (EMG) activity wasn't achromatized for the anterior temporalis or the masseter muscles but was changing between patients. Nevertheless, it was found that summation of muscular activity of the functioning side compensate for the activity of the other side. EMG activity decreased significantly in mostly all patients of this study ingested soft food (banana), in comparison to higher EMG activity with who ingested hard food (peanuts).

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