Wake-time Masticatory Muscle Activity (MMA): awake bruxism metrics and beyond

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Defining clinically oriented research routes to implement knowledge on awake bruxism (AB) metrics and, more in general, the assessment and report of masticatory muscles activities (MMA) is important for an enhanced comprehension and, ultimately, a more efficient management. Most of the recent literature focused on SB in particular, whilst knowledge on AB and the other wake-time MMA is generally fragmental. As a general rule, assessment can be based on non-instrumental or instrumental approaches. The former include self-report (questionnaires, oral history) and clinical examination, whilst the latter include electromyography (EMG) of jaw muscles during wakefulness as well as the technology-enhanced ecological momentary assesment (EMA). Phenotyping of different MMA activities, with a discrimination between physiological activities and those that are signs of underlying disorders, should be the target of a research task force. In the absence of available data on the frequency and intensity of wake-time bruxism-type masticatory muscle activity, also because of the lack of outcome metrics based on the most recent bruxism definition, any speculation about the identification of thresholds and criteria to identify bruxers is premature. Research routes in the field must thus focus on the improvement of data reliability and validity. As recommended in the STAB, at different levels, instrumentally-based and subject-based information must be gathered in a universally accepted standardized approach. Within these premises, this lecture will discuss the possible strategies to assess wake-time MMAs, also with a potential focus on the biospcyhosocial clinical implications for patients with orofacial pain.