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Bruxism and autonomic activity

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Sirs: Marthol and colleagues [3] make an important contribution to the neglected interface between chronic-stress-induced sympathetic activation and subsequent teeth-clenching and grinding (bruxism). Their findings are consistent with both the clinical and basic science literature. Reviews of this large empirical literature conclude that sympathetic activation is the precursor of bruxism (and *not* the other way

around) (e.g. [1]). Propranolol and prazosin have shown promise in preventing progression from jaw-clenching and teeth-grinding to chronic musculofacial pain. Research is sorely needed to study the efficacy of alpha and beta blockers for stress-induced bruxism in young individuals with posttraumatic stress disorder or following warzone exposure, among which bruxism and related symptoms are observed with alarming frequency [1].

Importantly, a 2003 Cochrane meta-analysis and an NIH technology assessment conference both state that the invasive (and often costly) dental procedures currently used for bruxism (including braces and other treatments for dental malocclusion) are not evidence-based and in some cases contraindicated [2, 4].

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