

Anterior temporalis and Suprahyoid EMG activity during jaw clenching and tooth grinding

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The aim of this study was to evaluate the anterior temporalis and suprahyoid electromyographic (EMG) activity during jaw clenching and tooth grinding at different jaw posture tasks. The study included 30 healthy subjects with natural dentition and bilateral molar support, incisive protrusive guidance and bilateral laterotrusive canine guidance. Bipolar surface electrodes were located on the right anterior temporalis and suprahyoid muscles. Three EMG recordings in the standing position were performed in the following tasks: C. clenching in the intercuspal position (IP); P1. eccentric grinding from IP to protrusive edge-to-edge contact position; P2. clenching in protrusive edge-to-edge contact position; P3. concentric grinding from protrusive edge-to-edge contact position to IP; L1. eccentric grinding from IP to laterotrusive edge-to-edge contact position; L2. clenching in laterotrusive edge-to-edge contact position; L3. concentric grinding from laterotrusive edge-to-edge contact positio