



[Angle Orthod.](#) 2000 Feb;70(1):63-9.

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## **Respiratory-related genioglossus electromyographic activity in response to head rotation and changes in body position.**

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The purpose of this study was to assess the effect of changes in body and head positions on respiratory-related activity of the genioglossus muscle in normal subjects in 8 body and head positions: (1) upright body with head straight, (2) upright body with head rotated to the right, (3) upright body with head rotated to the left, (4) supine body with head straight, (5) supine body with head rotated to the right, (6) supine body with head rotated to the left, (7) lateral recumbent body to the right, and (8) lateral recumbent body to the left. Phasic activity of the genioglossus muscle decreased significantly when subjects rotated their heads and moved from the supine to the lateral recumbent position. It is therefore concluded that genioglossus muscle activity is modulated in response to head rotation and changes in body position.

PMID: 10730677 [PubMed - indexed for MEDLINE]