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Induced oral breathing and craniocervical postural relations: an experimental study in healthy young adults.

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The influence of induced oral breathing on head and craniocervical posture was studied in ten healthy young adults. After a baseline recording, oral respiration was induced by using a swimmer's type nose clip. The subjects were filmed 15 and 90 minutes after wearing the nose clip, immediately and 15 minutes after taking it off. The angles C7-tragion versus the true vertical, nasion-tragion versus the vertical, and C7-tragion-nasion were calculated, and the difference between the baseline and the four experimental recordings was computed. During the experiment, head and neck positions were modified in all subjects, but with a large variability for both the direction (flexion or extension) and the extent of the modification. Overall, the mean differences were minimal with large standard deviations. Differences between baseline and the experimental recordings were significant only for the C7-tragion versus the vertical angle (analysis of variance, $p=0.0083$). In conclusion, induced oral respiration may have a significant role in the alteration of head and craniocervical posture, but the effect was highly variable.

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