CONCAVE EPIGLOTTIS WITH SLIGHTLY OBSERVED PETIOLE

Objective: The aim of this study was to define epiglottis morphologies and to investigate the relationship between the angle of the laryngeal surface of the epiglottis (ALSE) and the severity of obstructive sleep apnea (OSA) using flexible optic laryngoscopy (FOL) images.

Methods: A retrospective case-control study conducted at a university affiliated clinic. Eighty-three patients with CSA (Group 1) and 87 patients with no complaints of CSA (Group 2) who attended between May 2012 and January 2013 were evaluated. The ALSE was measured using images through FOL images. ALSE measurements were compared between the two groups. The correlation of ALSE measurements to the respiratory disturbance index (RDI) was analyzed.

Results: Group 1 comprised 79 male and 4 female patients with a mean age of 43 years, Group 2 comprised 72 male and 15 female patients with a mean age of 39 years. The mean ALSE measurement was 139.7° in Group 1 and 140.08° in Group 2 and was not significantly different between the two groups (P > 0.05). The mean RDI in Group 1 was 28.83 showing evidence of a low correlation between ALSE measurements and RDI. Epiglottis shape in patients from group one are depicted in Figure 6, shape in patients from group 2 are depicted in Figure 7. The distribution of epiglottic morphological shape for patients in group one is depicted in Figure 8, Figure 9 demonstrates a comparison between the two groups. Figures 2-4 and 6-8 show a comparison of the minimally concave epiglottis with OSA (Group 1) and 87 patients with no complaints of OSA (Group 2) who attended between May 2012 and January 2013 were evaluated. The ALSE was measured using images through FOL images. ALSE measurements were compared between the two groups. The correlation of ALSE measurements to the respiratory disturbance index (RDI) was analyzed.

Conclusions: Epiglottis morphology and ALSE cannot be used as predictive factors in CSA pathophysiology.

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REFERENCES