Glottis morphology after supracricoid laryngectomy with CHP or CHEP - protective and respiratory function assessment

Beata Paradowska-Opalka, Czesława Tarnowska, Ewa Grochowska

Summary

The aim of this study was to evaluate morphology and assess of the protective and respiratory function of larynx after cricohyopexis (CHP) and cricohyoepiglottopexis (CHEP). The examined group consisted of 58 patients (49 males and 9 female) operated between 1984-2002. An average age 54 (min. 36, max. 67). 32 patients underwent CHP and 26 had CHEP. CHP was performed in following modes: a) 1 aryteroid cartilage left in 17 (43.75%) cases, b) 2 aryteroid cartilages left in 14 (43.75%) cases and c) 1 aryteroid cartilage left and second resected with subsequent reconstruction in 1 (3.31%) case. In CHEP patients the operations were a) 17 (65.38%), b) 4 (15.38%) and c) 5 (19.23%) respectively. The aryteroid cartilage was reconstructed in 19 cases (8 after CHP and 11 after CHEP). In the reconstruction of aryteroid cartilage vascularized thyroid lobe was used in 8 cases (6 after CHP and 2 after CHEP), cuneiform or corniculate cartilage was used in 4 patients (1 CHP and 3 CHEP) and mucous membrane in 7 cases (1 CHP and 6 CHEP). To determine morphology of larynx, videolaryngoscopy was done. Thus examination distinguished 5 neoglottis shapes: oval (62,1%), longitudinal (13,8), triangle (8,6%), irregular (6,9%). In 8,6% cases the neoglottis was invisible. Decaniulation was possible in 66% patients, 24 (75%) after CHP and 14 (54%) after CHEP. In the group with both aryteroid cartilages left, 16 (89%) patients were decannulated. 31 (54%) patients complained about occasional liquid aspiration. To evaluate dysphagia, subjective complaints between 6-12, 12-18 and >18 months after surgery were analyzed. The swallowing was improving in the course of time. Between 6 and 12 months after surgery 31 (54%) subjects developed dysphagia, but after 18 months only 3 (5,1%) complained about swallowing impairment. Patients without aryteroid cartilage reconstruction or decanulated had more efficient swallowing.