

Hidden Epiglottic Abscess in Patients with Acute Supraglottitis

경희대학교 의과대학 이비인후과교실
은 영 규 · 이 영 찬

Background

Epiglottic abscess is an infrequent complication of acute supraglottitis. Although a flexible laryngoscope is recommended as the primary means of establishing a diagnosis of acute supraglottitis, CT is not preferred for the initial evaluation of acute supraglottitis. The aims of this study are to evaluate the value of routine CT in the early diagnosis of epiglottic abscess in patients with acute supraglottitis.

Material and Methods

A total of 202 patients with suspected acute supraglottitis were enrolled. All patients underwent CT to confirm the presence of abscess in the day of admission. The patients characteristics, symptoms at presentation, laryngoscopic findings of epiglottic swelling and arytenoid swelling by scope classification and initial laboratory finding were analyzed.

Results

Of 202 patients, 158 (78%) had acute supraglottitis and 44 (22%) had epiglottic abscess. There was no significant difference in age between the acute supraglottitis (AS) group and

the epiglottic abscess (EA) group. Males were significantly more frequent in the EA group than in the AS group ($p=0.042$). With compared the symptom at presentation, the patients with epiglottic abscess complained of voice change more frequently ($p=0.003$). Moderate or severe epiglottic swelling in scope classification was significantly associated with epiglottic abscess ($p<0.001$). In logistic regression analysis, voice change [OR=2.64, 95% CI=1.29–5.40, $p=0.008$] and moderate or severe epiglottic swelling in laryngoscopic findings [OR=3.94, 95% CI=1.63–9.53, $p=0.002$] were independent predictive factors for epiglottic abscess. The positive predictive values of voice change and moderate or severe epiglottic swelling were 33% and 30%, respectively. The negative predictive values of voice change and moderate or severe epiglottic swelling were 15% and 9%, respectively.

Conclusion

Routine CT might be suggested for early diagnosis of epiglottic abscess in the patients with acute supraglottitis, because of the poor predictive values of symptoms and signs.