

신경근육재활 및 전기진단

게시일시 및 장소 : 10 월 18 일(금) 08:30-12:20 Room G(3F)

질의응답 일시 및 장소 : 10 월 18 일(금) 10:24-10:28 Room G(3F)

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Dyspnea as an initial presenting symptom in patients of amyotrophic lateral sclerosis

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Objective

Amyotrophic lateral sclerosis (ALS) is the most common adult motor neuron disease which causes progressive weakness of muscular system. ALS shows diverse initial clinical manifestations and can be generally categorized into limb and bulbar onset. Respiratory insufficiency can also present as an initial symptom, but it is considered one of the most rare manifestations. In this research, we analyzed all ALS patients who presented with respiratory insufficiency as the initial presenting symptom at a single tertiary university hospital during the span of 10 years.

Materials and Methods

We retrospectively analyzed all the new ALS patients who visited the department of rehabilitation medicine of a single tertiary university hospital from Jan 2009 to Dec 2018. We excluded motor neuron disease patients whose diagnosis of ALS was unclear and those with incomplete medical records of onset symptoms. In the time span of our study, total of 420 ALS patients visited our hospital for the first time and two had incomplete medical records. Thus, our analysis focused on the remaining 418 ALS patients.

Results

Among the 418 patients, 18 (4.3%) showed initial symptom of dyspnea. 278 (66.5%) demonstrated limb onset, while 122 (29.2%) presented with bulbar onset. 18 dyspnea-onset patients were all male and the mean age at the time of onset was 64.3 years. On the contrary, the mean onset age of patients with limb or bulbar onset was 57.3 years, which is a statistically significant difference ($p = 0.013$). Of the 18 dyspnea-onset patients, 11 (61.1%) visited the emergency department due to respiratory distress and were intubated before the diagnosis of ALS. On the other hand, only 9 (2.3%) out of 400 limb or bulbar onset patients were intubated before the diagnosis of ALS. This difference was also statistically significant ($p < 0.001$).

Conclusion

ALS patients can occasionally present with respiratory insufficiency as the initial presenting symptom. In these patients, acute severe respiratory distress may occur before the appropriate diagnosis of ALS.