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Epipharyngeal Abrasive Therapy (EAT) Has Potential as a Novel Method for Long COVID Treatment

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Abstract: COVID-19 often causes sequelae after initial recovery, referred to collectively as long COVID. Long COVID is considered to be caused by the persistence of chronic inflammation after acute COVID-19 infection. We found that all long COVID patients had residual inflammation in the epipharynx, an important site of coronavirus replication, and some long COVID symptoms are similar to those associated with chronic epipharyngitis. Epipharyngeal abrasive therapy (EAT) is a treatment for chronic epipharyngitis in Japan that involves applying zinc chloride as an anti-inflammatory agent to the epipharyngeal mucosa. In this study, we evaluated the efficacy of EAT for the treatment of long COVID. The subjects in this study were 58 patients with long COVID who were treated with EAT in the outpatient department once a week for one month (mean age = 38.4 ± 12.9 years). The intensities of fatigue, headache, and attention disorder, which are reported as frequent symptoms of long COVID, were assessed before and after EAT using the visual analog scale (VAS). EAT reduced inflammation in the epipharynx and significantly improved the intensity of fatigue, headache, and attention disorder, which may be related to myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS). These results suggest that EAT has potential as a novel method for long COVID treatment.

Keywords: long COVID; epipharyngeal abrasive therapy (EAT); myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS); chronic epipharyngitis

1. Introduction

Long COVID refers to a series of health consequences that are present four or more weeks after infection with SARS-CoV-2 [1,2]. A systematic review and meta-analysis revealed that 80% of patients developed one or more long-term symptoms, including fatigue, headache, attention disorder, hair loss, sore throat, and dyspnea [3]. Myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS) is a frequently mentioned symptom of long COVID [4]. Hyperinflammation due to COVID-19 can cause ME/CFS, but