Impact of anxiety, stress and depression related to COVID-19 pandemic on the course of hereditary angioedema with C1 inhibitor deficiency

Deniz Eyice Karabacak¹, semra demir², Osman Ozan Yeğit¹, Ali Can¹, Kadriye Terzioglu³, Derya Erdoğdu², Muge Olgac⁴, raif coskun⁵, Bahauddin Çolakoğlu¹, Suna Büyükoztürk², and Ashi Gelicik¹

¹Istanbul University Istanbul Faculty of Medicine
²Istanbul University, Istanbul Faculty of Medicine
³Kartal Dr Lütfi Kirdar Education and Research Hospital
⁴Şişli Hamidiye Etfal Education and Research Hospital
⁵Prof Dr Cemil Taşçoğlu City Hospital

December 24, 2020

Abstract

Background: Hereditary angioedema (HAE) attacks can be provoked with psychological factors. The aim of this study was to assess the effects of anxiety, depression and stress related to COVID-19 pandemic on disease activity of HAE patients during the quarantine period (QP) and the return to normal period (RTNP). Methods: This prospective study was conducted between March 2020 and September 2020 in four allergy centres. Demographic, clinical features and mental health status were evaluated in QP (from March to the beginning of June) and RTNP (from June to the beginning of September) by the government. The 10-point visual analogue scale (VAS10) was used to define the severity of HAE attacks. Depression-Anxiety-Stress Scale-21 (DASS-21) and Fear of Covid-19 (FC-19) scales were performed to assess mental health status. Results: 139 HAE patients were included in the study. In QP, median attack numbers and median VAS10 scores were 5 (min-max: 0-45) and 6 (min-max: 0-10), respectively. HAE attack numbers, DASS-21 stress, anxiety, depression and total DASS-21 scores, as well as FC-19 scores were higher in QP than RTNP (p=0.001, p<0.001, p=0.001, p<0.001, p<0.001, p<0.001, respectively). However, there was no difference in attack severity scores between the two periods (p>0.05). Conclusions: This study revealed that the restriction measures during Covid-19 outbreak causes an increase in the number of HAE attacks in relation to anxiety, depression, stress and fear of Covid-19 pandemic. Therefore, it is important to provide psychological support to HAE patients during the pandemic.

Hosted file
