

بحث رقم (6)

عنوان البحث باللغة الانجليزية

Changes of Audio-vestibular profile during Covid-19 pandemic in Egyptian patients

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Background: Multiple neurological symptoms, including loss of consciousness, headaches, and vertigo, have been reported by COVID-19 patients. Otologic symptoms associated with COVID-19 include vertigo spells, sudden hearing loss, and facial paralysis. Currently, it is unknown the pathological effects of COVID-19 on hearing and the vestibular systems. **The purpose:** of this study is to perform a comprehensive battery of post-recovery tests to determine if persons infected with COVID-19 had experienced any changes to their auditory and vestibular system. **Methods:** The study comprised 52 participants who finished their treatment with no prior balance or hearing problems. Only patients diagnosed via PCR were included in the study. Pure-tone audiometry used to assess the patients' hearing. Vestibular system was assessed using bedside tests, Ocular (oVEMP) and cervical Evoked Myogenic Potential (cVEMP), and Videonystagmography (VNG). **Results:** According to the mean values of the 4000 Hz and 8000 Hz in both ears, there was a statistically significant difference between the COVID-19 positive and control groups. The two groups were found to have statistically significant difference in positioning and head shaking test results. According to the mean value of cVEMP and oVEMP asymmetrical ratio, there was a statistically significant difference between the two groups which was found to be greater in COVID-19 positive patients. **Conclusion:** In an audiological assessment, the high frequencies in the COVID-19 positive group were higher in thresholds than those in the control group. Comparatively to the control group, asymmetric findings were discovered in the vestibular system, specifically in the oVEMP and cVEMP. Also significant number of BPPV positive patients in Covid-19 positive group was found. To enable early diagnosis and treatment, we advise COVID-19 patients to proceed with an audio-vestibular evaluation once their illness has stabilized.