The significance of routine laboratory parameters in patients with sudden sensorineural hearing loss. Yasan H1, Tüz M1, Yarıktaş M1, Aynali G1, Tomruk O2, Akkuş O3.

Author information

Abstract

There are several factors (viral infections, metabolic and ototoxic disorders etc.) accused for the development of sudden sensorineural hearing loss. Some prognostic factors (late onset of treatment etc.) had been evaluated in the literature. There is no sufficient data on the effect of routine laboratory parameters on the development and/or prognosis of sudden sensorineural hearing loss. The aim of this study is to investigate the effects of routine blood chemistry and hematological parameters on the development and prognosis of disease in patients with idiopathic sudden sensorineural hearing loss. One hundred and forty-seven patients with the diagnosis of idiopathic sudden sensorineural hearing loss followed up during the periods of 2000-2010 years were included in this study. One hundred and three septoplasty patients with no otologic complaints were enrolled as control group. Following the clinical and demographic evaluations, patients with idiopathic sudden sensorineural hearing loss and control groups, and patients treated successfully and patients with poor outcome were compared with each other. Data were analyzed by T test. All hematological and biochemical parameters were compared. Hemoglobin, hematocrit, white blood cell count, total and direct bilirubin, fasting blood glucose level and aspartate aminotransferase were significantly different between idiopathic sudden sensorineural hearing loss and control groups. There was no significantly different parameter between patients treated successfully and patients with poor outcome. Hemoglobin, hematocrit, white blood cell count, total and direct bilirubin, fasting blood glucose level and AST all can be risk factors for SHL, or they can be the result of undetermined pathology, because these parameters have no effect on the prognosis. Other routine parameters seem to have no effect on the development and/or prognosis of idiopathic sudden sensorineural hearing loss.