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Tongue hematoma and psychomotor agitation in the course of alcohol use disorder - case report

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ABSTRACT

Excessive alcohol consumption can have many repercussions. Cirrhosis, injuries and infectious diseases are the most common. The following case report shows a patient admitted to the emergency department due to swelling of the tongue that prevented speaking. Laboratory tests showed elevated levels of markers of liver damage: AST, GGTP, total bilirubin, CRP. Prolonged INR, APTT and platelet deficiency were also discovered. This indicated bleeding due to alcoholic cirrhosis as a diagnosis. The patient was given, among others, diuretics and corticosteroids, after which a decrease in hematoma has been observed. The patient was transported to the Otolaryngology Department. On the same day he attacked the doctor and freed himself from physical coercion which was applied. As a result of these events he was transferred to a

neuropsychiatric hospital. Described case indicates a correlation between a deficiency of coagulation factors and the formation of a hematoma of the tongue. It also emphasizes the importance of being cautious about patients who may experience sudden changes in behavior for neurological reasons.

Keywords: tongue diseases; hematoma; psychomotor agitation; alcohol use disorder

INTRODUCTION

Harmful alcohol consumption caused about 3 million deaths in 2016, which makes its impact on mortality greater than tuberculosis, diabetes or HIV / AIDS. According to WHO statistics for 2018, 22.7% of men in Poland exhibited alcohol use disorder (AUD) and 4.1% concerned the problem of alcohol dependence. [1] More men than women (3.7% in Poland was classified as experiencing AUD) abuse alcohol, which translates into more deaths and diseases among men than women associated with this addiction. This difference is also caused by the greater tendency of men to risk behaviours related to heavy alcohol consumption such as smoking tobacco. The burden of the effects of alcohol abuse is more pronounced in low and medium economic status societies. More alcohol-attributable deaths are present there and the effects of alcohol-borne infectious diseases are more pronounced. Among the most common alcohol-attributable disorders are: unintentional and intentional injuries, infectious diseases, malignant neoplasms, diabetes mellitus, epilepsy, digestive diseases. Alcohol accounts also for a high percentage of causes of liver cirrhosis and oral cavity diseases.

Patients abusing alcohol constitute a large percentage of people admitted to Emergency Departments. This case report describes a rare complication of alcoholism - tongue hematoma. Despite the absence of alcohol in the patient's blood, physicians were able to observe significant irregularities in his blood count. The patient's attack of aggression, which occurred after about 48 hours from admission despite the lack of hyperactivity earlier, is also interesting.

CASE PRESENTATION

67-year-old male patient was admitted to Emergency Department on July 2019 due to enlarged tongue. During the first examination patient was in a medium condition, cardiovascularly and respiratorily stable. Interview with the patient was impossible to collect due to speech

difficulties caused by the filling of the entire mouth by the enlarged organ. The patient's tongue was all bruised. When trying to speak, red-brown fluid flowed out from the patient's mouth. Patient underwent gastroenterological consultation and CT scan which revealed intra-tongue bleeding. In the longitudinal muscle and genioglossus muscle of tongue a moderately visible, hyperdense area corresponding to the hematoma was observed. After administration of the contrast agent, no perceptible vascular malformations of the tongue area were visible. Palpation showed soft abdomen, with the exception of the left epigastrium, in which hematoma was visible and the abdominal wall was hard.

In the past the patient was diagnosed with hepatic cirrhosis and arterial hypertension (180/100 mmHg). The patient does not remember the names of the hepatological drugs taken except Acard (acetylsalicylic acid). Blood test results are as follows: CRP - 10,259 mg/L; total bilirubin – 13 mg/dL; INR – 2,1; APTT - 41,6; AST – 119 IU/L; ALT – 35 IU/L; GGTP - 10,00 IU/L; RBC - $2,66 \times 10^{12}/L$; HGB - 10,6 g/dL; HCT - 30,6%; PLT - $69 \times 10^9/L$; PCT - 0,05%. Blood sample was icteric. He denied alcohol consumption in 'recent times'. The patient did not notice the yellowing of eyes, which was clearly visible to physician. He has been diagnosed with the following disorders: haemorrhage, not elsewhere classified (R58); alcoholic cirrhosis of the liver (K70.3); essential hypertension (I10); harmful use of alcohol (F10.1). The patient was given the following medicines: furosemide, Cyclonamine (etamsylate), Exacyl (tranexamic acid), Dexaven (dexamethasone). All drugs were administered intravenously because the patient could not take them orally due to swollen tongue. The hematoma visibly decreased after the first day in hospital. Due to persistent high blood pressure, despite the administration of antihypertensive drugs, therapy with nitroglycerin in the pump was started. After that normalization of blood pressure was obtained.

After the E.R examination, the patient was admitted to the Otolaryngology Department.

During hospitalization, the patient showed signs of aggression against medical staff and other patients. He did not follow any medical orders. On the second day of his stay in the hospital, he attacked the doctor, smothering her against the walls. She was released by a doctor who was nearby. After that incident, a physical coercion was applied to the patient, from which he freed himself. The patient was transferred to a neuropsychiatric hospital after consultation with the doctor on duty.

DISCUSSION

There is a wide range of complications of alcohol abuse. Liver cirrhosis is one of the clinically most important and most common. [2] This description shows a fairly rare complication of alcohol use disorder - tongue hematoma. Reports of similar cases point to the coexistence of thrombocytopenia [4] and elevated INR [5] in patients with swollen tongue. This indicates a

correlation between bleeding and coagulation disorders, which in the above case are probably caused by alcoholic cirrhosis of the liver.

In laboratory tests, it was not possible to detect the presence of alcohol in the patient's blood and he denied taking it recently. Instead, there was a decrease in albumin, a significant increase in ferritin (1211 ng/ml with normal iron level), and a significant increase in total bilirubin (9,40 mg/dl). These results indicated liver damage due to excessive alcohol consumption. Attention is also drawn to the reduced level of platelets ($69 \times 10^9/L$) and PCT (0,05%). The causes of this condition can be traced to the patient's alcoholic cirrhosis [2] and thrombocytopenia could have been the cause of a tongue hematoma. [4]

The patient's aggressive behavior is also noteworthy. Its occurrence can be attributed to his delirium tremens (DTs). Hyperactivity occurred within at least two days of stopping alcohol consumption, which is a characteristic period for the development of DTs. [3] In this case there was an extreme manifestation of the disease in the form of an attack on medical staff. Fortunately no one was hurt, but this example makes one pay extra attention to patients who may, due to neurological reasons, rapidly change their behavior.

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