

Alcohol consumption, neurological symptoms and diagnostic challenges in a patient with a percutaneous endoscopic gastrostomy

Consumo de alcohol, síntomas neurológicos y retos diagnósticos en un paciente con una gastrostomía percutánea

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Addiction is a highly complex phenomenon that involves manifestations in a wide range of dimensions, such as psychological, behavioral, medical and socioeconomic. Many theories have tried to explain the extreme behaviors addiction imposes on afflicted individuals. However, we're still far from reaching a definite and global explanation capable of unifying all the aspects of addiction (Nutt, Lingford-Hughes, Erritzoe & Stokes, 2015; Poher, 2013).

Alcohol is only second to nicotine in the list of the most consumed substances worldwide. Here we present a case report that describes a complex behavioral phenomenon in an alcohol dependent patient, which indeed serves to illustrate some of the core features of addiction.

The patient was a 60 year-old male, who carried a feeding gastrostomy due to a oropharyngeal cancer that required a buccopharyngectomy and an hemiglossectomy, as well as a tracheostomy in 1999. The patient suffered also from a long standing alcohol use disorder.

In the beginning of 2005 the patient was admitted to the Emergency Room due to an acute episode with gait ataxia, a decrease in his level of alertness, dysarthria and bilateral nistagmus in all gaze directions. Several ancillary tests were performed (CT scan, blood analysis, EKG, EEG), with no anomalies found. The symptoms resolved in less than 24 hours. Two more admissions took place during 2005 with identical symptoms. As the previous one, it was self-limited and ancillary tests found no relevant anomalies.

In 2006 the patient was admitted to the Neurology Ward in order to study what were deemed as recurrent encephalopathic episodes. Again, several ancillary tests (CNS MRI, EEG, supraaortic Eco-Doppler, lumbar puncture) retrieved no relevant findings.

A possible epileptic origin was attributed to the clinical presentation, therefore levetiracetam 1000 mg per day was started. It was subsequently changed to valproic acid, and finally in 2008 to carbamazepine 600 mg daily. Despite all that, he was admitted several times to the Emergency Department due to the same neurological symptoms between 2006 and 2009.

It was not until August 2009 that the final diagnosis was made. The patient had been injecting himself large amounts of alcoholic beverages through his gastrostomy, a fact that had gone unrecognized up until then. He started being visited in the Addiction Unit, and several treatments, both psychological and pharmacological have been delivered so far. However, the patient has only attained brief abstinence periods. He has also presented some complications, such as gastric hemorrhage after drinking while on disulfiram.

Some considerations seem important while reviewing this case. First, the unusual route of administration. Not only is the gastrostomy a very rare manner of ingesting alcoholic beverages, but also one that allows for high alcohol blood concentrations to be achieved. This fact was the origin of the neurological symptoms the patient presented with several times. Although other non-oral routes

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of alcohol ingestion have been described, it seems they are also highly infrequent (Stogner, Eassey, Baldwin & Miller, 2014).

Second, despite his medical records (alcohol dependence and buccopharyngeal cancer) which are clearly associated with current alcohol ingestion, the physical state of the patient made it seem reasonable not to consider alcohol in the differential diagnostic process, since he could not ingest any beverage. Moreover, some of the classical symptoms that allow for the recognition of alcohol intoxication, such as fetor, were absent. Taken all together, despite the simple, final solution to the puzzle, the diagnostic process was a clear challenge. Proof of that are the 4 years follow-up by the Neurology Department, the several pharmacological treatments received and the amount of ancillary tests performed.

Finally, this case serves well to illustrate the nature of addiction itself, where ingestion of the substance becomes overriding, no matter what the difficulties and the consequences are.

As a conclusion, we believe this case shows how alcohol, a frequently consumed substance in our society, must remain an important option when working on several differential diagnoses, especially those with neurological symptoms such as stupor, ataxia and nistagmus.

Conflict of interests

The authors declare no conflict of interests.

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