CASE REPORT

A Rare Case of Alcohol-Induced Psychotic Disorder (Alcoholic Hallucinosis) Responding to Olanzapine

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Abstract

This is a case of a 40-year-old man with a background history of alcohol dependence syndrome presented with brief history of overt auditory hallucination. His presentation is acute in onset with primary auditory hallucination, retained personality and insight with no evidence of thought disorder or clouding of consciousness. No abnormalities were found following a medical work-up including blood investigation and MRI brain. A diagnosis of alcohol-induced psychotic disorder (AIPD) was made and he was commenced on a second-generation antipsychotic (olanzapine) with favourable response. AIPD is a rare complication of chronic alcohol abuse which leads to acute prominent auditory hallucination and paranoid ideation. Antipsychotic medication remained the mainstay of treatment for AIPD, but the evidence remained quite limited.

Keywords: Alcohol-induced Psychotic Disorder, Alcoholic Hallucinosis

Introduction

Alcohol-induced psychotic disorder (AIPD) is a rare condition caused by chronic alcohol use which causes mental and behavioural symptoms which are not part of alcohol intoxication or an alcohol withdrawal state [1]. AIPD or formerly known as alcoholic hallucinosis shares similar clinical symptoms of other psychotic disorder but has been found to be a unique and independent condition [2].

Case Report

A 40-year-old single man with a background history of alcohol dependence syndrome presented to the emergency department following his general practitioner (GP) referral with a 6-days history of overt auditory hallucination. He reported that his experience started off with simple auditory hallucinations, i.e. hearing rumbling noise outside his house, rattling doors sounds. He thought someone was at the door and he ended up checking his door regularly. After several days, he started experiencing more complex auditory hallucinations. He started hearing boots marching, multiple male voices outside his house, loud music playing outside his house, and he started to believe that there were people outside the house trying to get him.
He started experiencing repetitive auditory hallucination, which a man is addressing him as a second person and said “I will kill you because you came to my place with a hurling stick” and another female replied, “you’re going to end up killing him.” He reported this voice was loud, repetitive and prevented for him from getting any sleep. He was extremely frightful of this experience, and he spoke to his housemate about them which then brought him to see his GP. He denies any other paranoid ideation or any delusional beliefs. He acknowledges that this auditory hallucination was an abnormal experience. He denies any visual hallucination. He denies any mood symptoms preceding the hallucinatory experience.

On mental state examination, he presented with reasonable self-care, appropriate and engaging well. He was mildly anxious. There was no evidence of any formal thought disorder. His speech was clear and his thought was coherent. He was actively experiencing auditory hallucination during the interview. There was no evidence of overt alcohol withdrawal on assessment. He was orientated well to time and place.

He reported over 20 years history of persistence alcohol use with daily use of lager between 15 to 20 cans (2100g - 2800g alcohol units per week). He reported ongoing alcohol use the last 6 days despite his symptoms. He reported his longest period of abstinence was 9 months following residential treatment 15 years ago. He denies any previous admission to hospital due to alcohol, no previous head injury, alcohol-related seizure or Wernicke’s encephalopathy. He has no previous psychiatric history. There was no family history of psychotic disorder.

Blood investigation includes FBC, U&E, Calcium, TFT, LFT, B12, Folate, Ferritin, Iron Studies which shows macrocytosis MCV=102fL (80-96), elevated ALT=71U/L (0-45) and low iron=8.4umol/L (12.5-32.2)). MRI Brain was normal.

The clinical impression was this is alcohol-induced psychotic disorder due to acute onset, primary auditory hallucination, retained personality and insight with no evidence of thought disorder or clouding of consciousness. He was initially treated with olanzapine 5mg at night, and subsequently was increased to 10mg. He was also commenced on alcohol detoxification on admission with chlordiazepoxide tapering dose (30mg QID) over five days and thiamine 300mg daily. He shows significant improvement after 5 days which close to pre-morbid baseline. He was discharge on day 12. He was referred to the outpatient addiction day centre and remained well on subsequent review.

Discussion

Alcohol-induced psychotic disorder is a rare complication of chronic alcohol use. The lifetime prevalence of AIPD was 0.4% prevalence in the general population and 4% in alcohol dependence patients [3,4]. The pathogenesis of AIPD remains elusive; however, generalised cerebral dysfunction secondary to reduced regional cerebral blood flow has been proposed [5]. AIPD is characterised by acute onset of auditory hallucinations and often persecutory delusions, with the absence of cognitive deficits and any thought disorder [6]. Antipsychotic medication remained the mainstay of treatment for AIPD, but the evidence remained poor especially the use of second-generation antipsychotics [7].
Conflicts of Interest

No conflicts of interest

References


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