

Studying the relevance of alcoholism impact on autolytic ideation and depression

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ABSTRACT

Alcohol consumption is often encountered as comorbidity in many cases initially submitted for other medical conditions, while also often representing the main etiological factor in those diseases determinism. In terms of psychiatric pathology, most of the have studies shown that nearly half of all patients with psychiatric disorders exhibit abusive consumption of alcohol. In this way, the etiopathogenic role of alcoholism can be often ascertained in most psychiatric disorders. Thus, the affective and anxiety disorders, the psychoses, dementias and personality disorders often include alcoholism as comorbidity. In addition, while some mental disorders are caused by abusive or long term consumption of alcohol, other appear due to withdrawal effects, and in other instances, the alcohol consumption aggravates a pre-existing psychiatric disorder. Thus, the present study was designed in order to determine the correlation between abusive consumption of alcohol and depression, as well as the autolytic ideation. Thus, the first objective was to deter-

mine the correlation between alcoholism and the level of depression as measured by The Hamilton Depression Scale (HAMD), through the comparison of patients with major depressive disorders without alcohol-related illnesses and patients with major depressive disorder and anxiety. Also, we were interested in determining the impact of alcoholism on suicidal ideation by comparing the presence of suicidal ideation in patients with major depression with and without alcohol-related comorbidity. In conclusion we demonstrated that the occurrence of alcoholism in patients with depression influence the level of depression measured by the HAMD Scale and also that there is an autolytic ideation in patients with depression influenced by the presence of alcohol consumption.

KEYWORDS

alcoholism, autolytic ideation, depression

INTRODUCTION

Alcoholism is a major problem in modern society, both in terms of direct and indirect costs caused by alcohol, as well as the medico-legal, social and professional complications which frequently associate the abusive consumption of alcohol. The epidemiological data on alcohol consumption in society indicate figures of more than 140 million people suffering from ethanolic dependence (alcoholism) and frequency of death caused by excess alcohol consumption of 1.8 million per year (1).

Moreover, the alcohol consumption is often encountered as comorbidity in many cases initially submitted for other medical conditions, while also often representing the main etiological factor in those diseases determinism. In terms of psychiatric pathology, most of the have studies shown that nearly half of all patients with psychiatric disorders exhibit abusive consumption of alcohol (2, 3, 4).

In this way, the association between substance abuse and another psychiatric condition are generally called co-occurring disorders. Also, the simultaneous presence of alcoholism and of another psychiatric disorder worsens the clinical and functional evolution compared to the two separate conditions (6).

In addition, the etiopathogenic role of alcoholism can be often ascertained in most psy-

chiatric disorders. Thus, the affective and anxiety disorders, the psychoses, dementias and personality disorders often include alcoholism as comorbidity. In addition, while some mental disorders are caused by abusive or long term consumption of alcohol, other appear due to withdrawal effects, and in other instances the alcohol consumption aggravates a pre-existing psychiatric disorder.

Also, in some cases, alcohol consumption occurs as an intention to self-improve certain mental symptoms such as anxiety, depression, psychosis, hypnic disorders or stimulant side effects of certain medications (5). Still, from all psychiatric disorders, the affective disorders and depression in particular are most commonly associated with abusive consumption of alcohol (7).

Furthermore, patients suffering from a major depressive disorder may present an increased risk of suicide. The studies on patients who died by suicide show that in 30 % of the cases, the blood alcohol level was around the legal limit or above the legal limit at the time of suicide, and half of them were suffering from major depression (8). In this way, it seems that alcohol abuse increases ten times the risk of suicidal behaviour (9).

In this context, the evaluation and management of alcohol abusive consumption and dependencies is particularly important in psychiatric practice. The frequency of these three ma-

for problems in psychiatry, as well as their significant impact on the evolution of the psychiatric patient justifies this current scientific approach. In this way, the present work aims to display a sequence of research within a broader study concerning the impact of alcohol consumption in the affective disorders.

Thus, the present study was designed in order to determine the correlation between abusive consumption of alcohol and depression, as well as the autolytic ideation. The level of depression was assessed using specific scales of depression, and the presence of suicidal ideation through a clinical interview. Thus, the first objective was to determine the correlation between alcoholism and the level of depression as measured by The Hamilton Depression Scale (HAMD), through the comparison of patients with major depressive disorders without alcohol-related illnesses and patients with major depressive disorder and anxiety. Also, we were interested in determining the impact of alcoholism on suicidal ideation by comparing the presence of suicidal ideation in patients with major depression with and without alcohol-related comorbidity.

MATERIAL AND METHODS

The present study included a number of 150 subjects, out of whom 55 patients were diagnosed with major depressive disorder, 50 subjects were diagnosed with major depressive disorder and generalized anxiety disorder and a number of 45 subjects with the diagnosis of major depressive disorder and alcohol dependence. The patients included in the study were among those who submitted for admittance in „Socola” Clinical Psychiatric Hospital from Iași. The patients in the study groups were diagnosed according to the diagnostic criteria for alcohol dependence as described in ICD-10 and DSM-IV-tr.

Criteria for inclusion and exclusion

In this way, the criteria for inclusion and exclusion were:

- patients aged between 18 and 65 years;
- diagnosis of major depressive disorder with or without alcohol dependence or major depressive disorder and generalized anxiety disorder without alcohol dependency according to the criteria diagnoses of ICD-10 and DSM IV-Tr (12, 13) and
- also patients had to be able to understand and sign their consent for participation in the study.

On the other side, the exclusion criteria were the represented by:

- any other mental disorder other than those referred to in the criteria for inclusion;
- the presence of decompensated somatic disorders and also
- neurological somatic disorders or medication that could cause deficiencies in pulse control (brain tumours, trauma, epilepsy, hyperthyroidism, Cushing's disease, treatment with cortisol).

Thus, the patients were selected for inclusion in the study after checking the conditions of inclusion and exclusion as referred to above. After the inclusion in the study, the demographic data were collected from each participant. The Hamilton Depression Scale was applied to each subject included in the study. Also, the suicidal ideation was assessed by clinical interview for each case.

The investigation tools

The HAMD Scale (Hamilton Depression Rating Scale) is the most widely used scale in the clinic for evaluating depression. The scale assesses the depressive symptoms of the last week, the severity of depression and response to antidepressant therapy. The scale was originally published in 1960, and subsequently several variants of the scale appeared (14, 15). The number of scale items varies quite a lot among the va-

riants used in clinical trials, from shorter scale variants with 6, 7 or 8 items, to variants with longer 17, 21 or 28 items. The most commonly used versions of the Scale are the HAMD17 and HAMD21.

Also, this questionnaire assesses the symptoms associated with depression, as well as the mood, the feelings of guilt, suicidal ideation, insomnia, activity (slowness or agitation), weight loss and somatic symptoms (digestive, urinary, respiratory and cardio-vascular manifestations).

Moreover, each item is scored on a Likert Scale of 3 or 5 points, depending on each item individually. The sum of the scores from each item represents the final score and is an indicator of the presence or absence of depression, as well as of the intensity of depression. In this way, a score between 0 and 7 is considered normal, while a score of 20 or more indicates moderate or severe depression (16, 17). Estimated administration time is approximately 20 minutes.

Still, we have to mention that the scale limitations include a lack of evaluation of atypical

symptoms, such as hypersomnia or hyperphagia, as well as the excessive focus on symptoms such as insomnia and insufficient focus on more significant depression symptoms such as the suicidal ideation.

RESULTS

Alcoholism and the level of depression – a comparison between the patients with depression and the patients with depression and alcoholism

In this way, the initial comparison between the level of depression among the groups of patients with major depression with and without alcohol dependence diagnosis, through the scores on the HAMD Scale and using the Anova statistical tool, indicated a significant increase ($F(1.98) = 6.5, p = 0.01$) for the total scores means in the patients who were exhibiting the diagnosis of alcoholism (Figure 1).

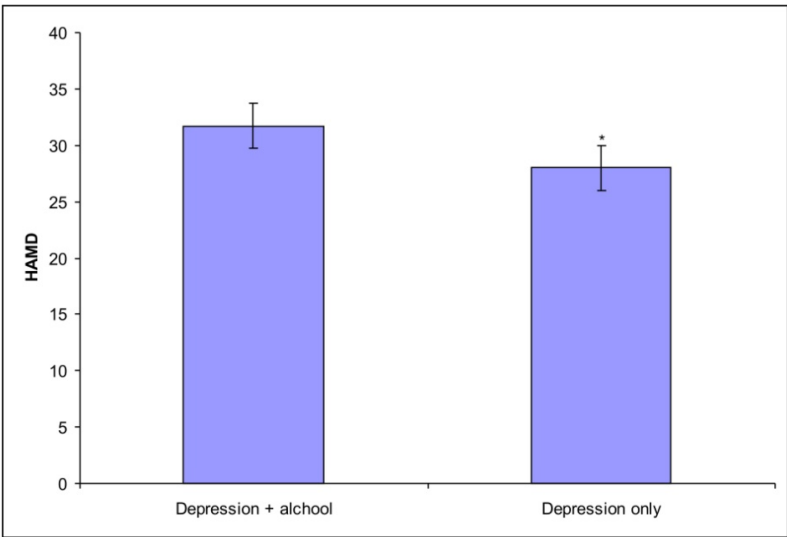


Figure 1. Comparison between the HAMD Scale score means in patients with depression versus patients with depression and alcoholism

In addition, the statistical comparative analysis of the HAMD scale scores in the patients with major depressive disorder and the patients with major depressive disorder and anxiety highligh-

ted a non-significant difference ($F(1.93) = 0.33, p = 0.56$) between the two groups of patients (Figure 2).

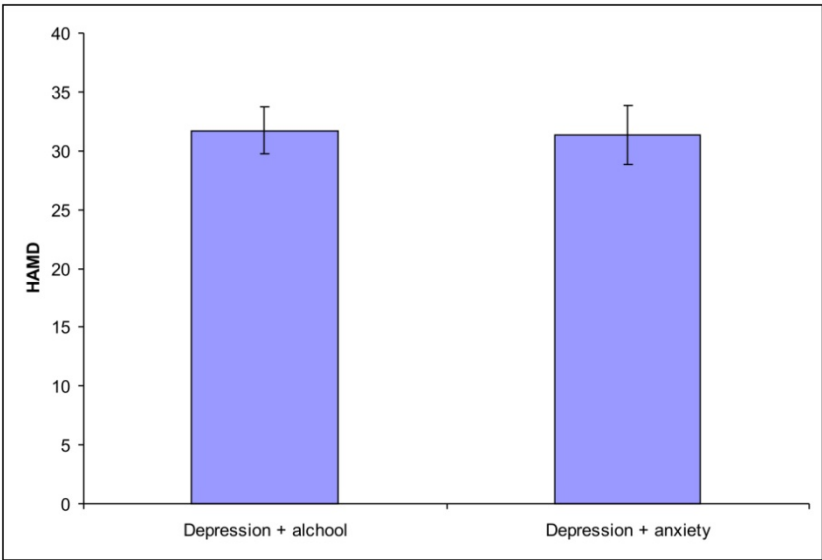


Figure 2. Comparison between the HAM-D Scale score means in patients with depression versus patients with depression and anxiety

Alcoholism and depressive ideation – a comparison between patients with depression, depression and anxiety, and depression and alcoholism

In this way, the autolytic ideation was assessed using the clinical interview for all the patients included in the study. Thus, the comparison between the three groups of patients indicated significant differences ($F(2.147) = 5, p = 0.01$),

with the majority of the patients with depression and alcoholism having suicidal ideation as compared with the other two groups. It should be also mentioned that the lowest means indicate more patients with autolytic ideation, while the higher means show a lower number of patients with suicidal ideation. Thus, the fewest patients with suicidal ideation were in the group with depression and anxiety (Figure 3).

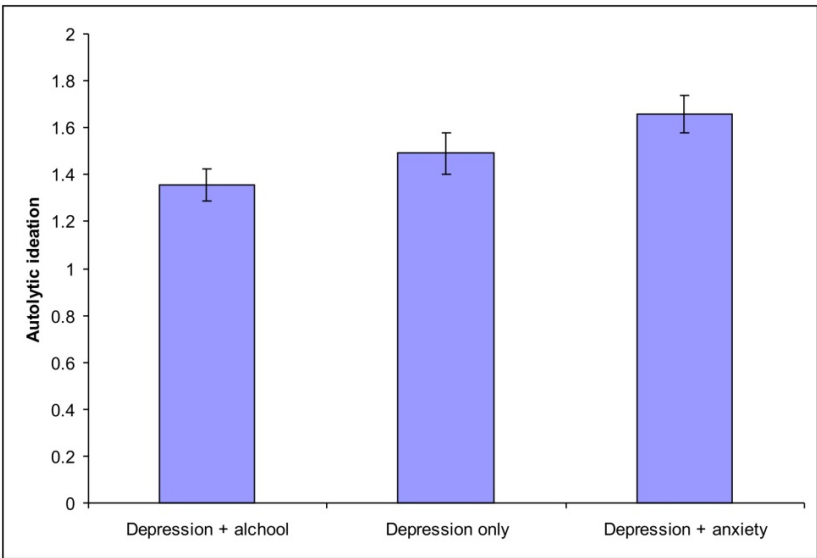


Figure 3. Comparison between the autolytic ideation in the group of patients with depression versus the group of patients with depression and anxiety versus the group of patients with depression and alcoholism
1 = autolytic ideation, 2 = without autolytic ideation

DISCUSSION

As stated above, the results shown in the present paper are only a part of the data from an extensive study covering the implications of alcoholism in affective disorders with reference to the suicidal behaviour and hetero-aggressive behaviour. In this way, the comparison between the intensity of depression measured by HAMD Scale in patients with major depression *versus* patients with major depression and alcoholism indicates a higher level of depression in patients who had been diagnosed with an alcohol-related disorder.

Moreover, further comparison by HAMD Scale scores, in the case of patients with depression and anxiety, indicates increased levels of depression in the patients with depression and alcoholism. In this way, the results are in line with the researches in the field that show correlations between depression and alcoholism.

Thus, there have been proposed three possible explanations for this causal relationship, common etiology or methodology error. The causal hypothesis suggests short-term pharmacological changes induced by alcohol abuse that cause depression, while in the long-term depression is explained by hippocampal atrophy.

Also, the common etiology hypothesis claims that at the base of both aspects would stand the bio-psycho-social stress (18). Also, studies show a positive association between the amount of ingested alcohol and the intensity of depressive symptomatology (19).

In addition, people with alcohol-related disorders have a risk of two to three times higher to develop depression, in the population studies, while in the clinical studies the prevalence of depression in alcoholics seem to be higher (20).

Furthermore, the most serious complication of depression is suicide. In our study, most patients with autolytic ideation were the patients with major depression and alcoholism, follo-

wed by the patients with major depression. It is well known the risk of suicidal behaviour in the patients with depression, as well as in the patients with problems related to alcohol consumption (21, 22, 23, 24, 25). Moreover, it seems that the association between major depression and substance abuse increases the risk of suicidal behaviour (26).

Also regarding the mechanistics of the aforementioned aspects, it is believed that the complex relationship between alcoholism, depression and suicidal behaviour is reflected on the biochemical level. Thus, the CSF analysis showed abnormalities of serotonin metabolism based on the determination of the 5-hydroxy indolacetic metabolite (5HIA) in the depression cases and suicidal behaviour in particular. Also, decreased levels of this serotonin metabolite are observed in impulsivity, aggressiveness manifested especially when alcohol consumption occurs (10).

It is also well known that the impulsivity and aggression attitude correlate with suicidal behaviour (11). In addition, with increased relevance to our work presented here, the suicidal behaviour is encountered in depression and abusive alcohol consumption. As a matter of fact, a suicidal behaviour includes suicidal ideation, suicidal attempts, and completed suicide, as the suicidal ideation and suicidal attempts are major risk factors for the completed suicide.

In this way, our study draws attention to the increased risk of suicidal behaviour in the patients with depression and alcohol-related disorder and the need of careful evaluation of the alcohol consumption in the patients with psychiatric disorders, particularly with depression. Also, we consider necessary to improve the efficiency of the intervention measures for the prevention of suicide in the patients with depression, which should incorporate measures for the prevention and treatment of alcohol-related disorders.

CONCLUSIONS

Thus, in this paper, we selectively present several results from our study regarding the impact of alcoholism within affective disorders, demonstrating that the occurrence of alcoholism in patients with depression influence the level of depression measured by The HAMD Scale and also that there is an autolytic ideation in patients with depression influenced by the presence of alcohol consumption.

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