An efficient approach on alcohol dependence syndrome

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Keywords:
DSMIV, Alcoholic neuropathy, neuropathy, Wernicke encephalopathy, Korsakoff psychosis, cerebellar ataxia and peripheral neuropathy. Neuropathy due to alcohol consumption depends on the period and extent of total lifetime of alcohol consumption. Cultural and racial factors also play a role in the development of alcohol neuropathy. Alcohol consumption results in multiple end-organ damages. Alcoholic neuropathy is the most common harmful effects of excessive alcohol intake. The incidence of alcoholic neuropathy in the standard population is not accurate as the percentage varies extensively contingent on the description of chronic alcoholism and the criteria used to detect and classify neuropathy. According to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), studies involving clinical and electrodiagnostic tests prove that neuropathy is present in 25-66%. Alcoholic neuropathy depends on the extent and extent of total lifetime of alcohol consumption. Cultural and racial factors also play a role in resulting in alcohol neuropathy. Few studies suggest that the incidence of peripheral neuropathy is higher in alcoholic patients who have a family history of alcohol dependence syndrome. This is study finds the Common peroneal and sural nerves are the most common nerves to be involved in neuropathy. Predominantly axonal degeneration is the main pathology. Units of alcohol and CAGE criteria score has a 100% specificity in detecting patients prone to neuropathy.

INTRODUCTION

In this phase affords the creation of this research work—alcohol consumption outcomes in more than one end-organ damage. Alcoholic neuropathy is the maximum, not unusual harmful consequences of excessive alcohol intake. [1] The incidence of alcoholic neuropathy in the popular population is not correct as the share varies extensively relying on the description of persistent alcoholism and the standards used to stumble on and categorize neuropathy. According to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), research concerning medical and electrodiagnostic criteria prove that neuropathy is current in 25-sixty
Alcoholic neuropathy depends on the duration and quantity of general life of alcohol consumption. Cultural and racial factors additionally play a function in resulting in alcohol neuropathy. Few studies advise that the occurrence of peripheral neuropathy is better in alcoholic patients who’ve family records of alcohol dependence syndrome. [3]

In this article represents segment 2 of this article clarifies the aspect of the correlated works. In segment 3 represents the materials and methods accepted, and segment 4 describes the particulars of the experimentations and deliberations. Lastly, segment 5 accomplishes the article by the allocation of our extrapolations and future strategies.

**Related works**

In this segment represents focuses on the related works of this research work. The goals of alcohol requirement are the accomplishment of asceticism, reduced relapse and frequency, health and psychosocial functioning development. Measured alcohol ingesting as a first step in the procedure of treatment is followed, but it’s difficult to achieve a reduction in alcohol consumption in severely dependent patients. The difficulty is probably due to the established compulsion memory and reduced regulator of consumption. [4]

In the detoxification phase, withdrawal symptoms vary with every individual. Symptoms arise after 4-6 hours of abstinence and become predominant on the second day. Serious complications seen are delirium, seizures and hallucinations. Severe withdrawal symptoms should be preserved as an inpatient basis for 5 to 7 days. [5, 6] Benzodiazepines help to reduce central nervous system irritability. Other treatment factors include supplementation of thiamine and intravenous fluids administration. Anticonvulsants and antipsychotic agents are also used if corresponding manifestations occur. [7, 8]

Essential mechanisms of a comprehensive conduct program include the psychosocial treatment modalities. Adjunctive pharmacologic relapse prevention therapy is needed only for a small percentage of a few alcohol-dependent patients. [9]

The treatment settings contain principle hospitals, residential treatment facilities, partial hospitalization programs, and outpatient programs. [13] Relapse prevention phase can be treated on an outpatient basis. Peripheral neuropathy includes more than 100 types with its effects and prognosis. [14] Generally classified based upon the kind of damage to the nerves. Peripheral neuropathy is caused due to damage to axons or damage to the myelin sheath. Specific peripheral neuropathy involves both damages to axons and demyelination. Electrodiagnostic studies help in determining the type of peripheral neuropathy. [15].

**MATERIALS AND METHODS**

A cross-sectional study was conducted in the Psychiatric ward of MVJ Medical College and Research Hospital with 100 cases. Alcohol dependent syndrome patients were selected based on CAGE criteria. Based on studies including the clinical and electro-diagnostics criteria and criteria for alcoholism listed in the Diagnostic and Statistical Manual of Mental Disorders, the prevalence of neuropathy was found to be 25–66%. The factors responsible for the development of alcohol neuropathy are the extent of alcohol consumption and the quantity of total lifetime alcohol ingesting. In these patients, diabetes mellitus and other possible causes for neuropathy were ruled out by history and clinical examination. All the patients were subjected to nerve conduction study.

**RESULTS & DISCUSSIONS**

In this segment focuses on the results and discussions of this research work. In the study population, the mean age was 46.16 ± 7.5 years.

100 Patients meeting the inclusion and exclusion criteria were chosen. Their baseline characteristics are represented below [Table 1].

**Table 1: Baseline characteristics**

<table>
<thead>
<tr>
<th>Baseline parameter</th>
<th>Mean</th>
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<tbody>
<tr>
<td>Age in years</td>
<td>46.16 ± 7.5 years.</td>
</tr>
<tr>
<td>Duration of alcohol</td>
<td>19.14 ± 6.7 years.</td>
</tr>
<tr>
<td>Units of alcohol per week</td>
<td>32.1 ± 8.8</td>
</tr>
</tbody>
</table>

The above figure shows that most of the patients were middle-aged and were consuming alcohol for around 20 years. The mean alcohol consumption in units per week was 32.1 ± 8.8, inferring that most patients were heavy drinkers.

Mean value for the duration of alcohol intake was
19.14 ± 6.7 years and the mean value for the consumption of units of alcohol per week was 32.1 ± 8.8 units. Findings in NCS show that there was a significant reduction in the action potential of median, ulnar and peroneal motor nerves. Prolongation of latency and action potential was found to be reduced in sural nerves. Axonal neuropathy was the predominant pathology. A cut off value for developing neuropathy was found.

Age >43 years
Duration of alcohol 12 years
Units per week 25 units /week

Finally, a statistically significant connection was found among neuropathy and age of the study population, duration and units of alcohol consumption, CAGE criteria (p value= <0.001) was established in the present study.

CONCLUSION

Finally, this work concludes that Common peroneal and sural nerves are the most common nerves to be involved in neuropathy. Predominantly axonal degeneration is the primary pathology. Units of alcohol and CAGE criteria score has a 100% specificity in detecting patients prone to neuropathy.

The electrophysiological exams like nerve transference studies may be used to perceive subclinical imperative and peripheral neuropathy at the first degree of alcohol intoxication. So the implementation of suitable preventive size and remedy methodologies may be carried out to decrease the headaches of alcohol.

Furthermore, studies are needed to establish the development of neuropathy in pure alcoholic cases, excluding other confounding factors being a nutritional deficiency.

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Conflict of Interest

Authors declared no conflict of interest.

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