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Original Research Article

Study of Serum Uric Acid, SGOT, SGPT, and Testistorne Level Alcoholic Smokers

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Abstract

Introduction: Alcohol has a physical as well as a mental effect. Even moderate drinking appears to increase a person's chance of death from a range of causes, including cancer and some forms of cardiovascular disease. This article will explain how alcohol affects your physical health and address some often asked questions about the short- and long-term effects of alcohol on the body. Binge drinking or taking a large amount of alcohol in a short period of time, puts a lot of strain on your physique and inside tissues (and dismiss outcome in sensation a legacy succeeding a consumption sitting). Excessive alcohol consumption causes headaches, severe dehydration, nausea, vomiting, diarrhea, and gastritis. Excessive drinking, even on a single occasion, increases the risk of heart problems.

Aim: Study of Serum Uric Acid, SGOT, SGPT, and Testosterone Level Alcohol and Smoking Males

Material and Method: This study included total 40 males to age 20-55 years and divided in two groups one is once in week drinks and second group 5 to 10 cigarettes smoking per day. Previous history chronic alcoholic or last how many years consumed alcohol etc. included subjects were comes from OPD. Subjects under Observe Short-course focus in the Dept. of Medicine.

Result: Table on shows that Comparison between biochemical parameters alcoholic males and Smoker's males are serum Testosterone level are normal in both groups. The valves are shows statistically significant. P < 0.0001

Conclusion: Excessive alcohol consumption in the body on a regular basis in males has been shown to raise the risk of heart illness, liver disease, and renal disease, but some studies have shown that it can also create difficulties in the reproductive system.

Keywords: Alcohol, Cirrhosis, Liver, WHO, Heart, Testosterone

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Introduction

Alcoholism is a worldwide health issue. Extreme ethanol intake produces severe muscle damage since the liver is a major source of ethanol metabolism. Big parenchymal liver cells, which account for 70% of the weight of the liver, and P450

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2E1, which is present in the smooth endoplasmic reticulum, are the main metabolizers of alcohol. Cirrhosis of the liver is a precursor to cirrhosis of the liver: Up to 70% of alcoholics will have liver failure at some time in their lives. Cirrhosis of the liver is the leading reason of passing in the United States. In the year 2000, it was the 12th largest cause of death. Cirrhosis rates differ dramatically mortality depending on age group: they exceedingly low in young people but quite common in middle-aged people. Cirrhosis is the fourth important reason of passing among individuals aged 45 to 54. [1,2]

Certainly, allowing to the (WHO) utmost current relative risk valuation, alcohol consumption's negative effect on the worldwide problem of contamination and damage was only exceeded by insecure sex and infantile malnourished position, but it outperformed many traditional risk factors like unsafe water and sanitation, hypertension, high cholesterol, and tobacco use. Alcohol use, particularly heavy drinking, is a substantial risk factor for a number of health problems and hence contributes considerably to the global burden of disease. Alcohol is, in fact, the principal cause of over 30 illnesses and a contributory factor in many more. The most common disease categories caused totally or partially by alcohol consumption include infectious diseases, cancer, diabetes, diseases neuropsychiatric (including alcohol use disorders), cardiovascular disease, liver and pancreatic disease, and unintentional and willful injury. Knowledge of low-risk drinking has contributed in the development of low-risk drinking recommendations. These dangers of disease Aside from the physical hazards that alcohol use brings to the drinker, it may also hurt others' health and cause social harm to both the drinker and others, raising the total cost of alcohol consumption. These findings emphasize the need of creating current inhibition interventions to reduce the pain and distress produced by

unnecessary alcohol use, as well as the associated outgoings. [3]

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Alcohol has a physical as well as a mental effect. Even moderate drinking appears to increase a person's chance of death from a range of causes, including cancer and some forms of cardiovascular disease. This article will explain how alcohol affects your physical health and address some often asked questions about the short- and longterm effects of alcohol on the body. Binge drinking or taking a large amount of alcohol in a short period of time, puts a lot of strain on your physique and inside tissues (and dismiss outcome in sensation a legacy succeeding a consumption sitting). Excessive alcohol consumption causes headaches, severe dehydration, nausea, vomiting, diarrhoea, and gastritis. Excessive drinking, even on a single occasion, increases the risk of heart problems. One of these adverse properties is cardiomyopathy, which resources your heart muscle has a solider time forcing blood. High blood pressure, stroke arrhythmias, and a faster pulse are all indications of hypertension. Extreme alcohol intake on a single occasion might potentially result in alcohol poisoning. [4,

According to WHO estimates, some 5 million people die each year from smokingrelated diseases, with that figure likely to rise to 10 million by 2015 if current trends continue. According to various studies, smoking is connected to a variety of pathological states and disorders, including chronic obstructive pulmonary disease, cancer, gastrointestinal issues, periodontal disease, pancreatitis, metabolic syndrome, and several autoimmune diseases. Human mortality is mostly caused by toxic chemical poisoning and chemical-induced diseases. Tobacco use is one of the world's most significant concerns, claiming the lives of nearly eight million people every year. Tobacco usage is also responsible for about 7 million fatalities, 1.2 million of which are nonsmokers (SMS). During the previous decade, 337 million Indians have consumed tobacco. According to the World Health Organization, by 2020, India's tobacco-related mortality might reach 1.5 million per year. [6,7]

Aim

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Material and Method

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Sample Collection

5ml of blood sample were taken from each subject and divided into Plain Vial. Sample were used for the estimation of the plain sample were used to estimate the level of lipid profile.

Biochemical Analysis

The sample was used to estimate the levels of Lipid profile, serum Testosterone, serum SGOT, serum SGPT, serum uric acid, were estimated on AU480 Analyzer.

Result

Table 1: Comparison between biochemical parameters alcoholic males and Smoker's males

Parameters	Alcoholic- 20	Smokers -20	P-valve
SGPT	120.6±30.1	54.3±	P < 0.0001
SGOT	159.7±29.0	41.6±6.2	P < 0.0001
Uric Acid	7.44±1.97	5.0±1.2	P < 0.0001
Testosterone	316.4±110.1	490.7±128.2	P < 0.0001

Table on shows that Comparison between biochemical parameters alcoholic males and Smokers males are serum SGOT, SGPT, URIC ACID level are increased in alcoholics males compare to smokers. The valves are shows statistically significant. P < 0.0001

Table on shows that Comparison between biochemical parameters alcoholic males and Smokers males are serum Testosterone level are normal in both groups. The valves are shows statistically significant. P < 0.0001

Discussion

The belongings of alcohol vary depending on the sickness. CVD is a wide phrase that incorporates a range of disorders. Alcohol use, for example, has an almost entirely negative impact on hypertension, with a dose-response association indicating a direct rise in comparative danger with increasing consumption (Taylor et al. 2009). [8] A J-shaped curve depicts the link between alcohol consumption and heart disease produced by condensed blood flow to the heart (ischemic heart disease), with frequent light drinking demonstrating some protective effects.

Excessive alcohol use can lead to generative difficulties containing erectile dysfunction and uneven periods. Extreme consumption can reduce fertility in both men and women over time. Excessive alcohol habit, uniform if not chronic, can lead to alcohol-induced mental illnesses alcohol-induced depressive such as disorder, alcohol-induced bipolar disorder, alcohol-induced sleep disorder, alcohol-induced psychotic disease, to name a few. These issues are temporary and might occur as a result of binge drinking or withdrawal. [9]

Gout and high uric acid levels are more common in those who drink too much alcohol. Is elevated cancer risk. Alcohol, a known carcinogen, has been shown to influence the development of a variety of cancers. Heavy alcohol use (particularly when mixed with smoking) has been linked to the development of breast, liver, esophageal, head and neck, and colorectal cancers, as well as an increased risk of these cancers. According to new research, melanoma, prostate, and pancreatic cancer are all at an increased risk. Drinking 3.5 or more drinks per day, according to the National Cancer Institute, raises the risk of head and neck cancer by at least 2-3 times. [10]

Diverse lipid profile investigations in various groups of patients have been described 16-18. Studies on the impact of smoking19-20, thyroid problems 21-23, and the amount of HDL-C in smokers and non-smokers were reviewed. [11] These results matched those published by Bhadarge et al. Smoking causes an increase in catecholamine release, which leads to an increase in VLDL-C and a drop in HDL-C concentration, which might explain why HDL-C levels in chronic smokers continue to plummet. As a result, smoking promotes coronary artery disease and atherosclerosis diminishing the anti-atherogenic component HDL-C and actually raising the atherogenic lipoproteins LDL-C, causing the vascular endothelium to become severely weakened. In conclusion, this study will contribute to our understanding of how smoking impacts thyroid function as well as its harmful consequences. As a result, it may be useful in detecting and treating thyroid problems in smokers. Participants' enlarged understanding of their thyroid condition can aid in quitting smoking and so motivate them to alter their lifestyle behaviors. [12] This group of smokers had dyslipidemia. Smoking rates grow, especially among heavy smokers, and the changed lipid profile degrades. As a result, stopping smoking early can modify these developments, potentially avoiding serious health consequences.

Conclusion

Excessive alcohol consumption in the body on a regular basis in males has been shown to raise the risk of heart illness, liver disease, and renal disease, but some studies have shown that it can also create difficulties in the reproductive system.

References

- 1. Ambad, R. S., Nagtilak, S., Bhadarge, G. and Kaple, M. Glutathione-S-Transferase Pi and Malondialdehyde in Alcoholic Patients Attending Smhrc and Avbrh Hospital, Journal of Pharmaceutical Research International, 2021:33(37A):26-30.
- 2. Aragon CM, Rogan F, Amit Z. Ethanol metabolism in rat brain homogenates by a catalase-H₂O₂ system. Biochemical Pharmacology. 1992;44(1):93–98.
- 3. WHO. Global Health Risks. Mortality and Burden of Disease Attributable to Selected Major Risks. Geneva, Switzerland: WHO; 2009.
- 4. Centers for Disease Control and Prevention. (2020). Dietary Guidelines for Americans.
- 5. Sarkola, T., & amp; Eriksson, C. J. Testosterone increases in men after a low dose of alcohol. Alcoholism: Clinical and Experimental Research, 2003:27(4), 682–685.
- 6. Bhadarge, G., Ambad, R., Bankar, N. and Kotecha, R. (2021) "Study of Cigarette Smoking on Haematological Parameters and Lipid Profile in Vidharbha Region, India", Journal of Pharmaceutical Research International, 33(36A), pp. 213-217.
- 7. Gangaram Bhadarge, Nandkishor Bankar and Prajakta Warjukar. Study of Lipid Profile and Thyroid Profile in Smokers and Non-Smokers. Biosc. Biotech. Res. Comm. Special Issue Vol 14 No 07 (2021)
- 8. Taylor B, Irving HM, Baliunas D, Roerecke M, Patra J, Mohapatra S, Rehm J. Alcohol and hypertension: gender differences in dose-response

- relationships determined through systematic review and meta-analysis. Addiction. 2009 Dec; 104(12):1981-90.
- 9. Van Heertum, K., & Rossi, B. Alcohol and fertility: how much is too much? Fertility research and practice, 2017:3(1), 10.
- 10. National Institute on Alcohol Abuse and Alcoholism. Health risks and benefits of alcohol consumption. Alcohol Research & Health, 2000: 24(1), 5–11.
- 11. Bhadarge et al., Biosc. Biotech. Res. Comm. 2021: Special Issue Vol 14 No 07

e-ISSN: 0975-1556, p-ISSN: 2820-2643

12. Khaleel, H. Morgagni's diaphragmatic hernia with Large ASD SECONDUM AND SEVER PHT mimicking a severe congenital heart disease in a newborn and cause delayed diagnosis of Morgagni's diaphragmatic hernia. A case report. Journal of Medical Research and Health Sciences, 20225(3), 1832–1837.