

## RECOMMENDATIONS

According to the present study the following recommendations are proposed:

### **A- MEDICAL:**

Resuscitation and further treatment should ideally take place in any well prepared hospital.

- Only staff treating the patient should be within the immediate proximity of the patient.
- All staff with direct patient contact should follow standard precautions that the alcohol intoxicated patient may consumed adulterated alcohol with methanol.
- Gastric decontamination should be performed in early hours.
- Initial treatment of poisoned patients involves the standard ABC of resuscitation.
- Correction of fluid disturbances , hypoglycemia , metabolic acidosis should be carried immediately
- Train the doctors and other health care staff on treatment
- Continuous monitoring is required for developed complications especially in methanol intoxication . Careful observation probably saves many lives.
- Specific antidote treatment should be instituted based on the clinical picture and not on test results.
- The necessity of the presence of equipment that measure alcohol level.

### **B-Public awareness:-**

-Health education of the public about:-

- 1-Toxic hazards of alcoholic compounds.
- 2- Risk of intake of adulterated alcohol with methanol..

## REFERENCES

- 1- Roach J. 9,000-year-old beer re-created from Chinese recipe. National Geographic News [Cited On: 18 July, 2005]. Available from: [http://news.nationalgeographic.com/news/2005/07/0718\\_050718\\_ancientbeer.html](http://news.nationalgeographic.com/news/2005/07/0718_050718_ancientbeer.html). [Accessed On: 28 Oct, 2013].
- 2- Ligon BL. Biography: Rhazes: his career and his writings. *Semin Pediatr Infect Dis* 2001; 12(3):266-72.
- 3- Katz SH, Voigt MM. Bread and beer: the early use of cereals in the human diet. *Expedition* 1987;(28) 23-34.
- 4- Ballinger P, Long FA. Acid ionization constants of alcohols II Acidities of some substituted methanol and related compounds. ACS Publication 2000; 82 (4): 795-8.
- 5- Arnett EM, Venkatasubramaniam KG. Thermochemical acidities in three superbase systems. *J Org Chem* 1993; 48(10): 1569.
- 6- Alcohol 1911 encyclopedia Britannica. Way Back Machine [Last Update On: 22 Sep, 2006]. Available from <http://web.archive.org/web/20130824043949/http://www.1911encyclopedia.org/Alcohol>. [Accessed On: 1 Nov, 2013].
- 7- Wechsler H, Davenport A, Dowdall G, Moeykens B, Castillo S. Health and behavioral consequences of binge drinking in college. A national survey of students at 140 campuses. *JAMA* 1994;272(21):1672-7.
- 8- Johnston L, O'Malley PM, Bachman JG. Monitoring the future: national survey results on drug use 1975–1999, Volume I: secondary school students. Bethesda, Maryland: National Institute on Drug Abuse; 2000. 7-44.
- 9- Hingson RW, Heeren T, Zakocs RC, Kopstein A, Wechsler H. Magnitude of alcohol-related mortality and morbidity among U.S. college students ages 18-24. *J Stud Alcohol* 2002;63(2):136-44.
- 10- Andreasson S, Romelsjo A, Allerbeck P. Alcohol, social factors and mortality among young men. *Br J Addiction* 1991;86:877-87.
- 11- Fuchs CS, Stampfer MJ, Colditz GA, Giovannucci EL, Manson JE, Kawachi I, et al. Alcohol consumption and mortality among women. *N Engl J Med* 1995;332:1245-50.
- 12- Dworkin M, Falkow S. The prokaryotes: proteobacteria: alpha and beta subclasses. USA: Springer; 2006. 32-45.
- 13- Lichine A. Alexis Lichine's new encyclopedia of wines & spirits. 5th ed. New York: Alfred A Knopf; 1987. 12-8.
- 14- Ferreira MP, Willoughby D. Alcohol consumption: the good, the bad, and the indifferent. *Appl Physiol Nutr Metab* 2008; 33(1):12-20.

## References

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- 15- Breslin FC, Sobell SL. Alcohol administration methodology 1994-1995: what researchers do and do not report about subjects and dosing procedures. *Addict Behav* 1999 ;24(4):509-20.
- 16- Lieber CS. Cytochrome P-4502E1: its physiological and pathological role. *Physiol Rev* 1997; 77(2):517-44.
- 17- Symington L, Jackson L, Klaassen B. Toxic alcohol but not intoxicated--a case report. *Scott Med J* 2005; 50:129-30.
- 18- Mezey E, Rennie-Tankersley L, Potter JJ. Effect of dihydrotestosterone on turnover of alcohol dehydrogenase in rat hepatocyte culture. *Hepatology* 1998; 27(1):185-90.
- 19- Mezey E, Rennie-Tankersley L, Potter JJ. Liver alcohol dehydrogenase is degraded by the ubiquitin-proteasome pathway. *Biochem Biophys Res Commun* 2001; 285(3):644-8.
- 20- Norberg A, Gabrielsson J, Jones AW, Hahn RG. Within- and between-subject variations in pharmacokinetic parameters of ethanol by analysis of breath, venous blood and urine. *Br J Clin Pharmacol* 2000; 49(5): 399-408.
- 21- Vonghia L, Leggio L, Ferrulli A, Bertini M, Gasbarrini G, Addolorato G. Acute alcohol intoxication. *Eur J Intern Med* 2008; 19(8):561-7.
- 22- Roine RP, Gentry RT, Lim RT, Baraona E, Lieber CS. Effect of concentration of ingested ethanol on blood alcohol levels. *Alcohol Clin Exp Res* 1991; 15: 734-8.
- 23- Caan W, De Bellerocche J. Drink, drugs and dependence: from science to clinical practice. 1st ed. UK: Routledge; 2002. 43-66.
- 24- Agarwal-Kozlowski K, Agarwal DP. Genetic predisposition for alcoholism. *Ther Umsch* 2000; 57(4): 179-84.
- 25- Chen CY, Storr CL, Anthony JC. Early-onset drug use and risk for drug dependence problems. *Addict Behav* 2009;34(3):319-22.
- 26- Hoffman PL, Tabakoff B. Alcohol dependence: a commentary on mechanisms. *Alcohol Alcohol* 1996; 31 (4): 333-40.
- 27- Heffner CL. Diagnostic and statistical manual of mental disorders. 4th ed. Washington, DC: American Psychiatric Association; 1994. 1-2.
- 28- Goldman D, Linnoila M. Genetic approaches to alcoholism. *Prog Neuropsychopharmacol Biol Psychiatry* 1986;10:237-42.
- 29- Pickens RW, Svik DS. Genetic influences in human substance abuse . *J Addict Dis*1991;10:205-14.
- 30- Oscar-Berman M, Marinkovic K. Alcoholism and the brain: an overview. *Alcohol Res Health* 2003; 27(2): 125-33.
- 31- Martin PR, Singleton CK, Hiller-Sturmhofel S. The role of thiamine deficiency in alcoholic brain disease. *Alcohol Res Health* 2003;27(2):134-42.

## References

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- 32- Sand T , BR G , Michler R , Brodtkorb E , Helde G , Bovim G . Clinical utility of EEG in alcohol - related seizures . *Acta Neurol Scand* 2002 ; 105 : 18-24 .
- 33- Rehm J, Baliunas D, Borges GL, Graham K, Irving H, Kehoe T. The relation between different dimensions of alcohol consumption and burden of disease: an overview. *Addiction* 2010; 105(5): 817-43.
- 34- Butterworth RF. Pathophysiology of hepatic encephalopathy: a new look at ammonia. *Metab Brain Dis* 2002; 17: 221-7.
- 35- Parsons OA. Alcohol abuse and alcoholism. In: Nixon SJ (ed). *Neuropsychology for clinical practice*. Washington, DC: American Psychological Press; 1996. 175–201.
- 36- Mancall EL, McEntee WJ. Alterations of the cerebellar cortex in nutritional encephalopathy. *Neurology* 1995; 15:303-13.
- 37- Hansen HE, Amdisen A. Lithium intoxication: report of 23 cases and review of 100 cases from the literature. *Q J Med* 1998; 47(186):123-44.
- 38- Diener HC, Dichgans J, Bacher M, Guschlbauer B. Improvement of ataxia in alcoholic cerebellar atrophy through alcohol abstinence. *J Neurol* 1984; 231(5):258-62.
- 39- Tabakoff B, Hoffman PL. Ethanol and glutamate receptors. In: Dietrich RA, Erwin VG (eds). *Pharmacological effects of ethanol on the nervous system*. New York: CRC Press; 1996. 73-93.
- 40- Schuckit MA, Tipp JE, Bergman M. Comparison of induced and independent major depressive disorders in 2,945 alcoholics. *Am J Psychiatry* 1997;154:948-57.
- 41- Moeller FG, Dougherty DM, Lane SD. Antisocial personality disorder and alcohol-induced aggression. *Alcoholism. Clin Exp Res* 1998; 22: 1898-902.
- 42- Brady KT, Sonne SC, Roberts JM. Sertraline treatment of co-morbid post-traumatic stress disorder and alcohol dependence. *J Clin Psychiatry* 1995;56:502-5.
- 43- Strakowski SM, Delbello MP, Fleck DE, Arandt S. The impact of substance abuse on the course of bipolar disorder. *Biol Psychiatry* 2000;48:477-85.
- 44- Schuckit MA, Hesselbrock V. Alcohol dependence and anxiety disorders: What is the relationship?. *Am J Psychiatry* 1994;151(12):1723-34.
- 45- Kranzler HR. Evaluation and treatment of anxiety symptoms and disorders in alcoholics. *J Clin Psychiatry* 1996;57:15-24.
- 46- Altieri A, Bosetti C, Gallus S, Franceschi S, Dal Maso L, Talamini R. Wine, beer and spirits and risk of oral and pharyngeal cancer: a case-control study from Italy and Switzerland. *Oral Oncol* 2004; 40: 904-9.
- 47- Bienia A, Sodolski W, Luchowska E. The effect of chronic alcohol abuse on gastric and duodenal mucosa. *Ann Univ Mariae Curie Sklodowska Med* 2002; 57(2):570-82.

## References

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- 48- Merican College of Gastroenterology. Moderate alcohol consumption is associated with small intestinal bacterial overgrowth, study finds. Science Daily [Cited On: 28 November 2011]. Available from: <[www.sciencedaily.com/releases/2011/10/111031114949.htm](http://www.sciencedaily.com/releases/2011/10/111031114949.htm)>. [Accessed On: 1 Jan, 2014]
- 49- Bode C, Bode JC. Alcohol's role in gastrointestinal tract disorders. *Alcohol Health Res World* 1997;21(1):76-83.
- 50- Seitz HK, Poschl G, Salaspuro M. Alcohol and cancer of the large intestine. In: Cho CH, Purohit V (eds). *Alcohol, tobacco and cancer*. Basel: Karger; 2006. 63-78.
- 51- Witt H, Apte MV, Keim V, Wilson JS. Chronic pancreatitis: challenges and advances in pathogenesis, genetics, diagnosis, and therapy. *Gastroenterology* 2007;132(4):1557-73.
- 52- Apte MV, Pirola RC, Wilson JS. Where there's smoke there's not necessarily fire. *Gut* 2005;54(4):446-7.
- 53- Maisonneuve P, Lowenfels AB, Müllhaupt B, Cavallini G, Lankisch PG, Andersen JR. Cigarette smoking accelerates progression of alcoholic chronic pancreatitis. *Gut* 2005; 54: 510-4.
- 54- Strum WB. Abstinence in alcoholic chronic pancreatitis: effect on pain and outcome. *J Clin Gastroenterol* 1995; 20: 37-41.
- 55- Marchesini G, Moscatiello S, Di Domizio S, Forlani G. Obesity-associated liver disease. *J Clin Endocrinol Metab* 2008;93(11): 74-80.
- 56- Di Castelnuovo A, Costanzo S, Bagnardi V, Donati MB, Iacoviello L, de Gaetano G. Alcohol dosing and total mortality in men and women: an updated meta-analysis of 34 prospective studies. *Arch Intern Med* 2006; 166: 2437-45.
- 57- Lichtenstein AH, Appel LJ, Brands M, Carnethon M, Daniels S, Franch HA. Diet and lifestyle recommendations revision 2006: a scientific statement from the American Heart Association Nutrition Committee. *Circulation* 2006;114: 82-96.
- 58- Smith SC, Allen J, Blair SN, Bonow O, Brass LM, Fonarow GC. AHA/ACC guidelines for secondary prevention for patients with coronary and other atherosclerotic vascular disease. *J Am Coll Cardiol* 2006; 47: 2130-9.
- 59- Piano MR. Alcoholic cardiomyopathy: incidence, clinical characteristics, and pathophysiology. *Chest* 2002;121(5):1638-50.
- 60- Sesso HD, Cook NR, Buring JE, Manson JE, Gaziano JM. Alcohol consumption and the risk of hypertension in women and men. *Hypertension* 2008; 51: 1080-7.
- 61- Corrao G, Bagnardi V, Zambon A, La Vecchia C. A meta-analysis of alcohol consumption and the risk of 15 diseases. *Prev Med* 2004; 38: 613-9.
- 62- Djoussé L, Gaziano JM. Alcohol consumption and heart failure in hypertensive US male physicians. *Am J Cardiol* 2008; 102: 593-7.