

SCIENTIFIC ABSTRACTS

Fetal Alcohol Syndrome

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Background: About 40 thousand newborns are delivered annually with fetal alcohol syndrome (FAS). It induces serious CNS complications.

Methods: In a review of, the word " fetal alcohol syndrome" was searched in PubMed and Google Scholar and the retrieved articles were summarized.

Results: Many studies showed that alcohol can cause more defects in fetus than heroin, cocaine and marijuana. The possible defects caused by alcohol include physical, mental and behavioral retardation, learning deficits, growth restriction, and some social problems. FAS is more common than Down syndrome (1%). In Germany, 2200 newborns are delivered with FAS annually. According to the 2007 US National Survey on Drug Use and Health, pregnant women aged 15 to 44 reported alcohol use at a rate of 11.6%, with 3.7% reported binge drinking and 0.7% reported heavy drinking in the month before the survey. However, these rates were considerably higher in non-pregnant women with same age (53%, 24.1%, and 5.5% respectively). Alcohol use during pregnancy is a significant clinical concern. In South Africa, it is counted as 70-80 in 1000 live births. Alcoholic fathers may also induce some defects in their children.

Conclusion: FAS is nonhereditary cause of mental retardation and neurologic deficit in the Western world. The prevalence is high. It is preventable completely but has no treatment. In Iran we have no exact prevalence of FAS due to cultural problems. The day September 9th has been named for the FAS as the sign of 9 months of intrauterine life. Many countries such as Germany, USA, England, New Zealand, Scotland, Switzerland, Canada, Australia and Austria have paid lot of attention to prevention of FAS.

Keywords: Alcohol-Induced Disorders; Fetal Alcohol Spectrum Disorders; Intellectual Disability

Effect of Alcohol on Heart: Case Presentation of Two Alcoholic Patients with Alcoholic Cardiomyopathy

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Background: Alcohol consumption has multiple side effects on heart which can be divided to six subgroups: Heavy alcohol drinkers (80 g/day alcohol consumption) are most susceptible to cardiac complications. The aim of this study was to review alcohol side effects on heart and two present two alcoholic patients with alcoholic cardiomyopathy.

Case report: Case A: A 52 year-old man presented with fatigue, dyspnea, FC III from many years ago. He had previous history of increased TG and cigarette smoking. He had normal BP and FBS, TFT. Chest X ray revealed global cardiomegaly and wide carina angle. ECG showed LAE and sinus tachycardia. Coronary angiogram demonstrated normal coronary arteries. Echocardiography showed LVEF=30%, LAE, LVE, RVE and trace pericardial effusion. This patient was treated as a case of DCM for many years but he did not show any improvement. In following history taking, the patient told that he drinks alcohol for many years so we advised him to discontinue alcohol consumption. After several months, patient's clinical status improved and EF increased to 50%. Case B: A 39 years man presented with palpitation who was treated with beta blocker but he did not respond to the treatment. ECG revealed atrial fibrillation with rapid ventricular response (HR= 140/min). On echocardiography, valves function were normal and LVEF=58%, TFT was normal and patient denied smoking. This patient also had history of alcohol consumption, and after discontinuation of alcohol his symptoms resolved completely.

Discussion: In western countries the most common etiology of non-ischemic cardiomyopathies is alcohol consumption. But in Islamic countries it is very rare. However this diagnosis must be considered in all cardiomyopathy syndromes. The most common arrhythmia which could be seen with alcohol consumption is atrial fibrillation but other arrhythmias such as PVC, PAC, sinus tachycardia, atrial flutter, ventricular fibrillation can also be associated with heavy alcohol consumption. This kind of arrhythmia which is more common on holidays in western countries has been nominated as holiday heart syndrome.

Keywords: Alcoholism; Atrial Fibrillation; Cardiomyopathies