

Cardiac arrhythmias in chronic obstructive pulmonary disease

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Abstract

Background: As a result of hypoxia, acidosis and effect of drugs used in chronic obstructive pulmonary disease arrhythmia can develop in many patients. Improvement in pulmonary function will result in decreasing the incidence of arrhythmia

Aim of study: To describe the frequency of cardiac arrhythmia in patient with COPD recorded by 24 hour holter monitoring and their relationship to clinical and hemodynamic factors.

Patients and methods: Fifty patient with COPD and fifty patients with normal people monitored by pulmonary function test, 12 lead standard ECG and 24 hour holter monitor.

Result: Different types of arrhythmia were seen in patients with COPD and there is increase incidence of arrhythmia with the development of cor-pulmonal

Key words: ECG (electrocardiograph), COPD (chronic obstructive pulmonary disease), arrhythmia, ectopic.

IRAQI J MED SCI, 2008; VOL.6 (2):44-48

Introduction

The initial evaluation of patient suspected of having a cardiac arrhythmia begins with careful history, addressing specific questions regarding the presence of palpitation, syncope, spells of lightheadedness, chest pain or symptoms of congestive heart failure⁽¹⁾.

Palpitation may results from irregularities in cardiac rate or rhythm or a change in contractility of the heart⁽²⁾. The physician should inquired about circumstances that can trigger the arrhythmia, such as emotionally up setting event, ingestion of caffeine-containing beverages, cigarette smoking, exercise, excessive alcohol intake, or gastrointestinal problems^(1,2).

A careful diet and drug history can be useful, for example, in revealing that palpitations develop only after the use of nasal decongestant that contains sympathomimetic vasoconstrictor or in revealing that the patient has been exposed to street drugs such as cocaine. Clinical States that predict the genesis of arrhythmias should be considered, such as thyrotoxicosis, pericarditis, mitral valve prolapse^(3,4).

Variety of familial disorders can result in arrhythmias including myotonic dystrophy, Duchene muscular dystrophy, dilated cardiomyopathy and congenital conduction disorders can result in sudden death duo to arrhythmias^(5,6,7).

Patients and methods

This is prospective study that was done on one hundred patients who have been admitted to medical ward and out patient clinic of University Hospital of Al-nahrian College of medicine during the period from the first of June to fifteenth of October 2004. These patients were divided into two groups.

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Received: 19th August 2007, Accepted: 11th June 2008.