

Chronic cor-pulmonale in adults: An experience from a tertiary teaching hospital in Dharwad

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ABSTRACT

Background: Cor-pulmonale develops in response to acute or chronic changes in the pulmonary vasculature and/or the lung parenchyma that are sufficient to cause pulmonary hypertension. The true prevalence of cor-pulmonale is difficult to ascertain. However, recent advances in two dimensional echocardiography/Doppler imaging and biomarkers make it easier to screen and detect cor-pulmonale.

Aim: To study the etiology of cor-pulmonale, and to correlate it with the clinical, chest x-ray (CXR), electrocardiography (ECG) and echocardiography (ECHO) findings.

Methods: Fifty consecutive patients admitted with confirmed diagnosis of cor-pulmonale were included into the study. Detailed history, clinical examination, ECG, CXR and ECHO were carried out in all the cases.

Results: Out of the 50 patients, 32 were males and 18 were females. Maximum incidence was seen in 50-69 age group comprising 60% of the cases with mean age being 55.2 years. Majority (56%) of patients had the history of symptoms of more than 10 years duration. Chronic bronchitis was the underlying cause in the largest number (54%) of patients. Majority of patients had evidence of pulmonary hypertension. Q/R ratio in a VR >3 was observed in 60% of cases. On ECHO, right atrial enlargement was evident in 46% of patients and RVH was evident in 94% of cases.

Conclusions: In patients with clinical diagnosis of chronic cor-pulmonale, chest x-ray is a poor tool for detection of pulmonary hypertension, but gives information about its etiology. ECG provides information about RVH and right atrial enlargement. Echocardiography is helpful in detecting all cases of cor-pulmonale and to exclude pulmonary hypertension produced by left sided heart disease.

Keywords: cor-pulmonale, pulmonary hypertension, echocardiography
