ORIGINAL RESEARCH PAPER
Volume - 11 | Issue - 05 | May - 2022 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

INTRACARDIAC CALCIFICATION WITH CARDIAC CONDUCTION DEFECTS IN A CHRONIC OBSTRUCTIVE PULMONARY DISEASE PATIENT – AN INTERESTING CASE REPORT

Respiratory Medicine

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ABSTRACT

Mitral annular calcification (mac) is a chronic degenerative process of the fibrous support structure of the mitral valve. The reported prevalence of mac is about 8% in an unselected, general population and increases with age, in the presence of cardiovascular risk factors. It is also observed that mac has a female gender predominance with a prevalence of 12%. Its clinical relevance comes from mac's association with an increased rate of mortality and cardiovascular disease (cvd).

Occasionally, a chest x-ray might reveal calcific demarcation of the mitral annulus. Mac is usually seen as a c-, j-, u- or o-shape, with the open part lying at the site of the aortic outflow tract. Lateral projection usually better demonstrates mitral calcification because the overlying spine and main left lower lobe arteries in the posteroanterior view may mask its visualization. Fluoroscopy during coronary angiography can also show mitral calcification, but is not an accurate modality for assessment of the extent of mac.

Mac is usually an incidental finding in patients being evaluated for cardiovascular or pulmonary diseases. The presence of a calcified mitral annulus is asymptomatic, which precludes true evaluation of the prevalence of mac in the general population. We are presenting a case report of a female patient who is a known case of chronic obstructive pulmonary disease and had an incidental finding of mitral annular calcification on chest radiograph that was later confirmed by computed tomography (ct) and 2d echo findings.

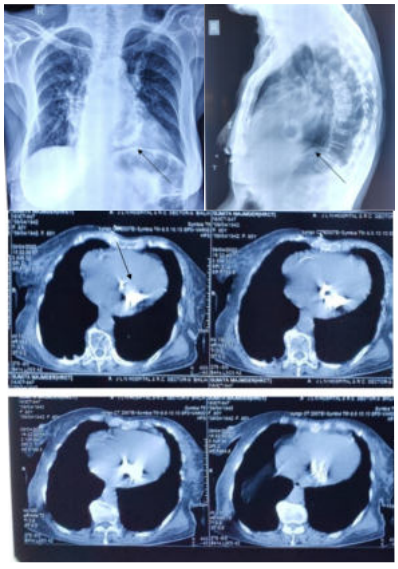
KEYWORDS

CASE REPORT:

80 Year Old Female Patient, Known Case Of Hypertension, Chronic Obstructive Pulmonary Disease With Old Stroke Presented With Chief Complaints Of Difficulty In Breathing Since 3 Days Cough Since 3 Days Examination Revealed Tachycardia With Tachypnea. Auscultatory Findings Of Bilateral Expiratory Rhonchi Was Heard. Pulse Was Irregular At The Time Of Admission.

Patient Was Managed Symptomatically With Corticosteroids And Nebulisation. Initial Ecg Showed Atrial Fibrillation Which Was Reverted With Inj. Amiodarone. Subsequent Ecgs Showed Ventricular Bigeminy And Trigeminy.

In Chest Radiograph Pa View Showed A Cresent Shaped Opacity In The Left Lower Zone, Lateral View Revealed The C – Shaped Opacity In The Cardiac Region. Further Imaging With Ct Thorax Showed Calcified Mitral Annulus. Cardiac Evaluation With 2d Echo Was Suggestive Of Calcified Mitral Annulus With Mild Tricuspid Regurgitation And Moderate Pulmonary Artery Hypertension (rvsp – 45 Mm Hg).



DISCUSSION:

Mac is usually an incidental finding in general population with a more prevelance in people with cardiovascular diseases, chronic kidney diseases and chronic pulmonary diseases. Mac is also associated with a higher morbidity and mortality. A thorough evaluation is needed in any elderly patient with a chronic obstructive pulmonary disease by using chest xray, hrct thorax and 2d echo. Complications like arrhythmias, conduction blocks, mitral regurgtitation, mitral stenosis and stroke are observed in such patients that may pose as an obstruction to the treatment of the patients.

CONCLUSION:

1. There should be proper periodical, clinical and radiological follow up in all advanced copd patients
2. Patient can be followed with ecg, chest xray, ct thorax and 2d echo during each hospital admission
3. These complications should also be thought of when managing a copd patient
4. This indicates the need of multidisciplinary approach of an advanced copd patient

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