

## Images in clinical medicine



# Massive cardiomegaly secondary to rheumatic heart disease

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**Received:** 05 Jan 2025 - **Accepted:** 12 Jan 2025 - **Published:** 24 Jan 2025

**Keywords:** Cardiomegaly, rheumatic heart disease, mitral valve stenosis

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**Cite this article:** Gaurang Aurangabadkar et al. Massive cardiomegaly secondary to rheumatic heart disease. Pan African Medical Journal. 2025;50(32). 10.11604/pamj.2025.50.32.46457

**Available online at:** <https://www.panafrican-med-journal.com//content/article/50/32/full>

## Massive cardiomegaly secondary to rheumatic heart disease

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## Image in medicine

A 54-year-old female patient presented to the respiratory physician with chief complaints of dyspnea on exertion, dysphagia, and chest pain. The patient's past medical history revealed a diagnosis of rheumatic heart disease, which was initially diagnosed 8 years back and a recent echocardiography report was suggestive of severe mitral stenosis with a left ventricular ejection fraction (LVEF) of 28%. An esophagoscopy was done given dysphagia which revealed no obvious abnormalities of the esophageal mucosa. A chest X-ray postero-anterior (PA) view was done which revealed the presence of a massive cardiomegaly with a cardiothoracic ratio of 0.80 (normal cardiothoracic ratio <0.50). A cardiologist's opinion was

taken and the patient was started on angiotensin-converting enzyme (ACE) inhibitors, oral furosemide (diuretic), and carvedilol (beta-blockers), along with regular follow-up. The patient was discharged with the same advice after 5 days of admission. Gross cardiomegaly is a rare complication of rheumatic heart disease, usually seen in patients with severe mitral stenosis, and occurs as a result of altered cardio-pulmonary

hemodynamics arising as a result of valvular pathology. Such patients usually present with complaints of dyspnea and dysphagia arising as a result of the considerable enlargement of the cardiac dimensions. This clinical image aims to highlight this striking presentation of gross cardiomegaly that is seen to occupy more than 75% of the hemithorax in horizontal dimensions.



**Figure 1:** chest X-ray postero-anterior (PA) view demonstrating gross cardiomegaly in a patient with rheumatic heart disease