neutrophil 80%, lymphocyte 16%; platelet count of 160000/cmm and ESR of 85 mm/hour. Sugar/ urea/ creatinine values were normal and liver function test showed normal bilirubin (1.1 mg %) with SGOT and SGPT 126 and 88 IU/L respectively. Chest x-ray showed (Fig. 1) a homogeneous opacity in left hemithorax with obliteration of left costo-phrenic angle mimicking pleural effusion. Transthoracic echocardiography showed (Fig. 2 and 3) a giant left atrium (11 cm) with clots in interatrial septum and LA free wall. Prosthetic mitral valve was in place. There was thrombosis along mitral valve cusps and decreased motility of the mitral annulus. Also there was spontaneous echogenicity in rest of the cavity with multiple large non-organized thrombi. The patient was not permitted to undergo trans-esophageal echocardiography (TEE). Also, her condition deteriorated very quickly after admission. The patient also had dyspnea, with frequent episodes of hypotension, reason why TEE could not be done.

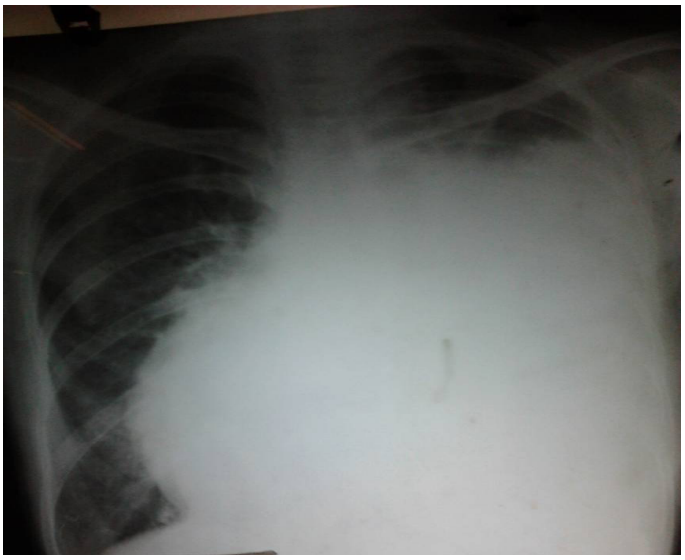

Figure 1: Chest x-ray mimicking pleural effusion.

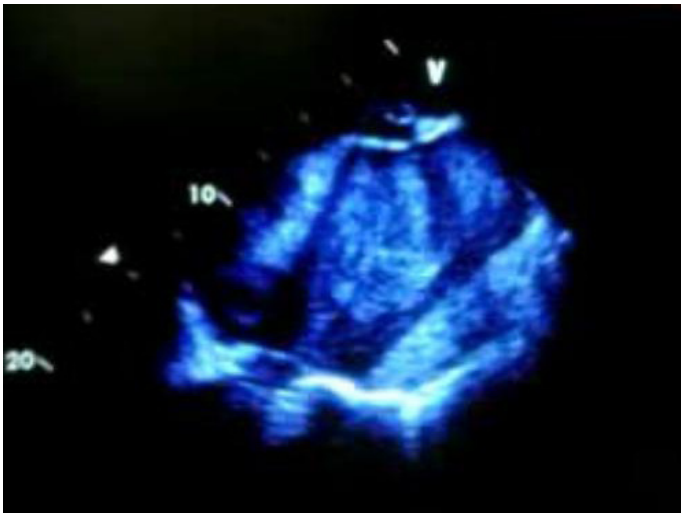

Figure 2: Transthoracic echocardiography showing a giant left atrium.

An ultrasonography of left hemithorax revealed (Fig. 4) a giant left atrium with spontaneous echogenicity. There was no pleural/pericardial effusion. Thus the huge opacity in chest x-ray (Fig. 1) is all due to the enlarged left atrium and the cardiothoracic ratio came 0.76. The patient was put on oral anticoagulants and aspirin. However, after a few days, before any surgical intervention could be done, she had an episode of ischemic cerebrovascular accident and died.

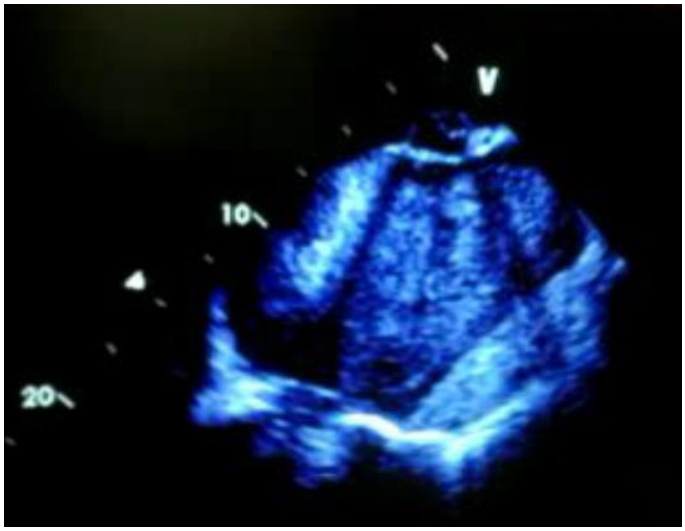

Figure 3: Transthoracic echocardiography showing a giant left atrium.

Figure 4: An ultrasonography of left hemithorax showing a giant left atrium with spontaneous echogenicity.

Discussion

Giant left atrium has become rare in present day owing to earlier diagnosis and treatment of rheumatic mitral valve disease.[2] Thus such echocardiographic or ultrasonographic images are rarely seen. Transthoracic ultrasonography picture is remarkable for clear visualization of the giant LA with clots and echogenic materials. In the absence of clot, the USG picture could be mistaken for aortic aneurysm.[1]

In severe cases of LA enlargement, the chest x-ray may be mistaken for pleural/pulmonary mass and USG may help in diagnosis, as this report shows. These cases mostly occur due to lack

of treatment. Patients with giant LA may have symptoms due to compression of esophagus and/or airways from enlarged posterior wall of the left atrium.[3] Despite a large LA, the patient did not have any obstructive symptoms like dysphagia or dysphonia. This is probably because the LA had expanded sideways into the thorax. Barium meal swallow or CT scan can be additional analysis.[1] Newer methods like cardiac scintigraphy can also be done.[4]

In this case, USG and echocardiography revealed a giant LA with spontaneous echo contrast due to multiple large non-organized thrombi, while clinical features and chest x-ray were misleadingly suggestive of a pleural pathology. In such case, high level of suspicion is needed as diagnostic or therapeutic aspiration of pleural effusion after chest x-ray to avoid devastating complication.

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