

## Left Atrial Aneurysm

N.N. KHANNA\*

R.P.S. BHARADWAJ\*\*

### Summary:

A case of left atrial aneurysm is being reported with relevant review of literature. The diagnosis is usually considered in patients presenting with a mass in left side of heart with supraventricular arrhythmia and signs and symptoms of cardiac compression. Surgery is curative.

Aneurysm of left atrium are rare and less than fifty cases have been reported till now<sup>1,2,3</sup>. They usually arise from the atrial appendage but aneurysms arising from the free wall and multiple small aneurysms have also been reported<sup>4</sup>.

### Case Report:

This 28 years old lady presented with palpitations and orthopnoea. Examination revealed a blood pressure of 106/70 mmHg, pulse-rate of about 84/minute, atrial fibrillation and absence of any cardiac murmur. Patient was obviously dyspnoic and trachea was shifted to right. X-ray chest in right anterior oblique view with barium swallow showed aneurysmal left atrium (Measuring 16 cm x 12 cm) displacing the esophagus posteriorly (Fig. 1). Echocardiography with Doppler examination confirmed the diagnosis and ruled out other pathologies. The left atrium was superolateral to left ventricle and was seen displacing the heart. Thrombus was also present in the appendage. The patient was put on oral anticoagulation and decongestive therapy and was advised surgery which she refused. Subsequently she was lost to follow up.

### Discussion:

Left atrial aneurysms are rare and thought to be due to congenital weakness of the atrial wall, leading

to gradual dilatation and ballooning. However, exact etiology is still not known. Three forms of aneurysms have been described in the literature viz intrapericardial aneurysms involving the left atrial free wall, aneurysms of appendage and multiple small aneurysms involving the entire atrial wall<sup>5</sup>. Aneurysm of left atrium should be differentiated from partial absence of pericardium with subsequent herniation of left atrial appendage pericardial cyst and tumours, left ventricular and coronary

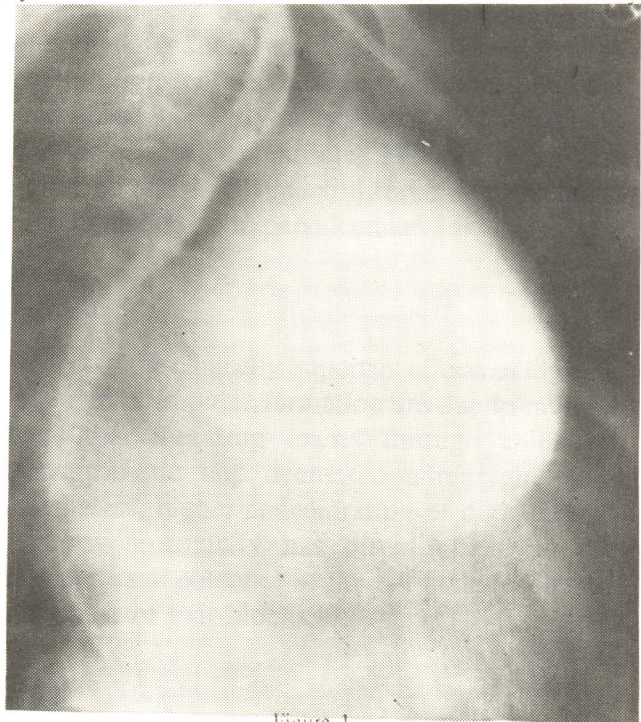


Figure 1.  
Chest X-ray with barium swallow, RAO view, showing a large (16 cm x 12 cm) left atrial aneurysm compressing and displacing the esophagus posteriorly.

\* Senior Resident, Deptt. of Cardiology.

\*\* Professor of Cardiology, Department of Cardiology, L.P.S. Institute of Cardiology, G.S.V.M. Medical College, Kanpur 208002, India.

artery aneurysm and giant LA enlargement secondary to valvular heart disease or cardiomyopathy<sup>6</sup>. These patients usually present with supraventricular dysarrhythmia or signs and symptoms of cardiac compression. Pulmonary arterial hypertension due to compression of pulmonary artery and signs and symptoms of heart failure in the presence of normal left ventricular performance (due to cardiac compression) may be present. Some patients present with left atrial thrombus and systemic thromboembolism. Operative excision of the aneurysm is curative.

#### References:

1. Huang Q.H., Wang N.D., Yang D.Y. & Doty, D.B.: Aneurysm of the left atrium. *Cardiovascular surgery*. 1993; 1,303-304.
2. Macleod CA, Ankeney JL, Perrin EV, Nickel SS, Liebman J: Left atrial aneurysm. *Am. Heart J.* 1970,80: 683-8.
3. Hansen JF, Rygg I, Efsen P. Intrapericardial left atrial aneurysm. *Am. Heart J.* 1974; 87: 113-16.
4. Okita Y, Miki S, Tamura T, Yamanaka K, Sasakabe H. Multiple congenital aneurysm of the atria. *Ann. Thorac Surg* 1990; 49: 672-3.
5. Uren N, Been M, Guzman F.: Congenital left atrial wall aneurysm in a patient with neurofibromatosis. *Br. Heart J* 1988; 59: 391-4.
6. Comess KA, Labate DP, Winter JA, Hill AC, Miller DC. Congenital left atrial appendage aneurysm with intact pericardium: diagnosis by transesophageal echocardiography. *Am Heart J.* 1990; 120: 992-6.