MULTIPLE CARDIAC TUMORS IN NEONATES: A CASE REPORT

ABID AMIN, NOOR AHMED & ZAHEER ALAM

INTRODUCTION

Benign and malignant tumors of heart are very uncommon and their diagnosis was very much challenging for physicians since the seventeenth century[1]. Intracardiac myxoma was first diagnosed by Angiography in 1952. Subsequently echocardiography led to more frequent correct diagnosis[2]. The introduction of TEE further improved definition of cardiac anatomy with visualization of left atrial appendage previously undetectable on routine transthorcic echocardiography. The heart may be site for primary tumors or may be invaded secondarily by malignancies that arise in adjacent or remote organs.

Primary tumors of heart are very rare with an incidence of in autopsy series reported to be between 0.001 to 0.03 percent. These tumors usually present as intracavitary lesions and more then 75% are benign[3]. Myxomas constitute nearly 50% of all histologicaly benign tumors of the heart 75% are located in LA, 18% in RA, 4% in RV and 3% in LV[4-7]. Cardiac myxomas usually originate from region of fossa ovalis but may arise from variety of locations within the atria. The occurrence of multiple tumors within LA, bilaterally in each atrium[8] or simultaneous in the atrium and ventricle[9] raises the likely hood of multicentric origin rather than metastasis of tumours.

Most patients with myxoma are 30-60 years of age although myxoma have been discovered in children, infants and neonate and the elderly. Children[10] have higher incidence of ventricular myxoma than to adults. A higher prevalence in females has characterized in most series. Familial occurrence has been reported more frequently in males. Myxoma vary from 1-15 cm in diameter with most measuring 5-6 cm.

An 8 days old baby girl was referred to the cardiac laboratory for echocardiography from nursery in Bolan medical complex Department of Cardiology BMC hospital Quetta hospital. The baby was well healthy weighing 8.2 Kgs. Her physical examination revealed only a mid systolic murmur at apex radiating to axilla. Chest film in antro-posterior position showed borderline cardiomagly. Her electrocardiograph and blood counts were within normal limits. 2-Diamensional echocardiography showed a large mass in left ventricle (fig. 1-3) attached to the lateral free wall, a small mass in RA (fig. 5&6) attached to the distal interatrial septa near the septal leaflet of the tricuspid valve resulting in mild TR (fig. 7), and an other small mass in RV again attached to lateral free wall.

It is very interesting to find cardiac tumors in this age group, only few cases have been reported. Neonate myxomas are extremely rare, this is the only case for the last twenty year in this lab. where 20-30 cases are referred for echocardiography every day.

REFRENCES.

1. Hall RJ Cooley DA, McAllister HA Jr, et al. Neoplastic heart disease. In: Fuster V, Alexander RW, O'Rourke RA, et al, eds. Hurst's The Heart 10th edition. New York: MsGrawhill;2001;2179-2197.

2. Peters MN, Hall RJ, Cooley DA, et at. The clinical syndrome of atrial myxoma. JAMA 1974; 230:695-701.

3. McAllister HA Jr. Primary tumors and cysts to the heart and Pericardium. Curr Probl Cardiol 1979; 4:1-51.

4. McAllister HA, Fenoglio JJ. Tumors of the Cardiovascular system. Washington, DC: Armed Forces Institute of Pathology; 1978.

5. McAllister H, Hall R, Cooley D. Tumors of the

* *Department of Cardiology BMC Hospital Quetta.*

heart and Pericardium Curr Probl Cardiol 1999; 24:57-116.

6. Burke A, Virmani R. Tumors of the heart and great vessels. In: Rosa J, Sobin LH, eds. Atlas of Tumor Pathology. Vol 3d ser, fascicle 16. Washington DC: Armed Froces Institute of Pathology; 1996:231.

7. Burke AP, Virmani R. Cardiac myxoma: A clinicopathologic and study. Am J clin Pathol 1993; 100: 671-680.

8. Dashkoff N, Boersma RB, Nanda NC, et al. Bilateral myxomas: Echocardiographic considerations. Am J Med 1978; 65:361-366

9. Morgan DL Palazola J, et al. Left heart myxomas. Am Jcardiol 1977;40:611-614

10. Davison ET, Mumford D, Zaman Q et al. Left atrial myxomas in elderly: Report of four patients ovar the age of 70 and review of literature. J Am Geriatr Soc 1986;34:229-233.

Figure 1. Showing a large mass in LV

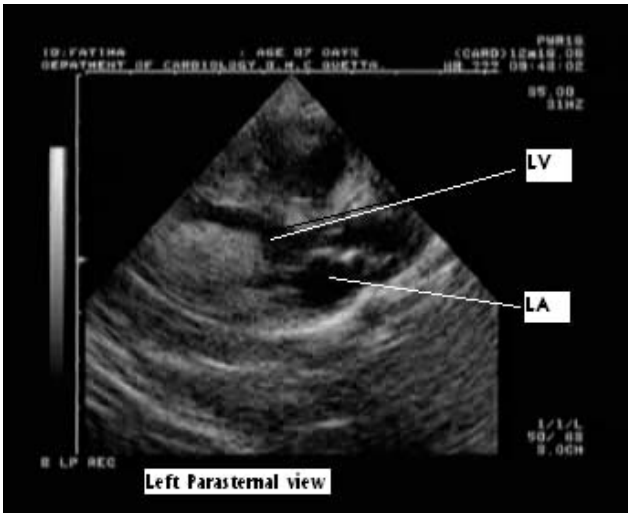

Figure 2. Parastenal Long axis showing a large mass in RV

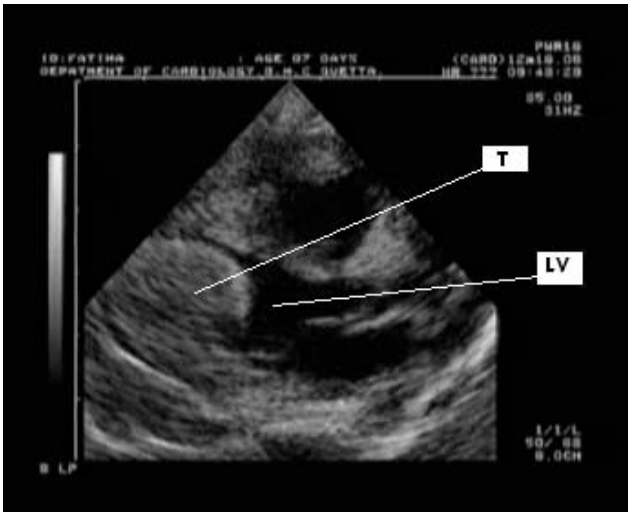

Figure 3 Parasternal long axis in colour view

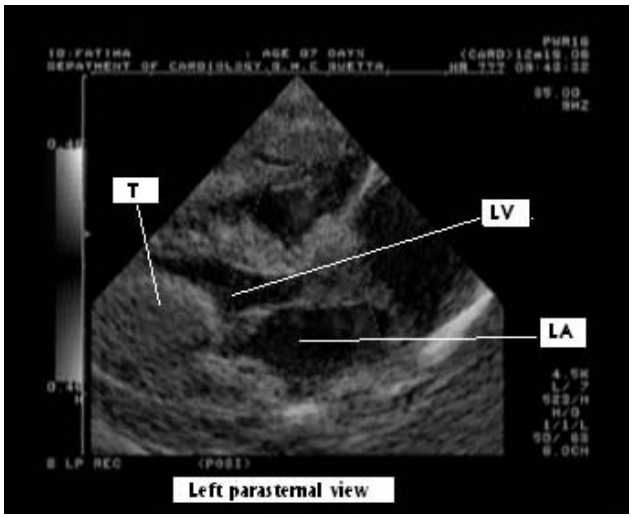

Figure 4. Left parasternal view showing a large mass in LV and a small one in RV

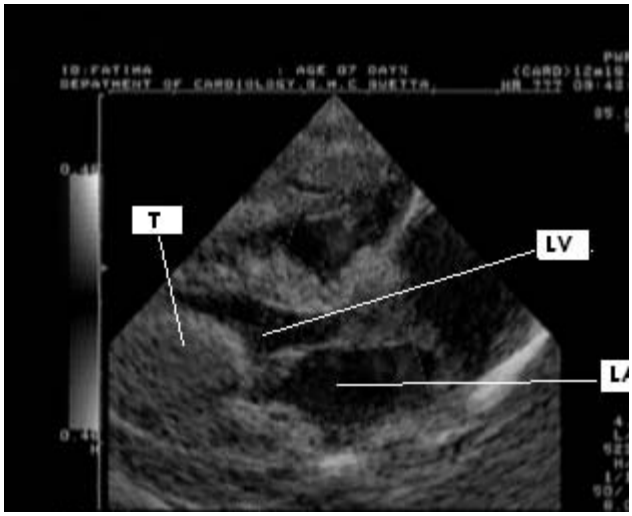

Figure 5 Subcostal view showing an other small mass attached to the distal IAS near the septal tricuspid leaf let.

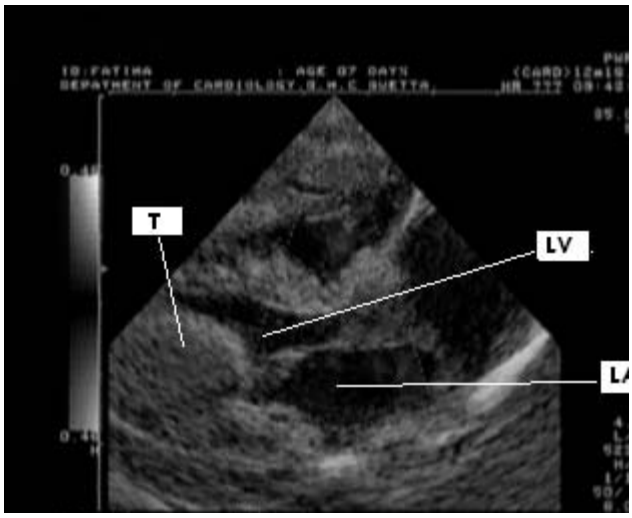

Figure 6 Apical view

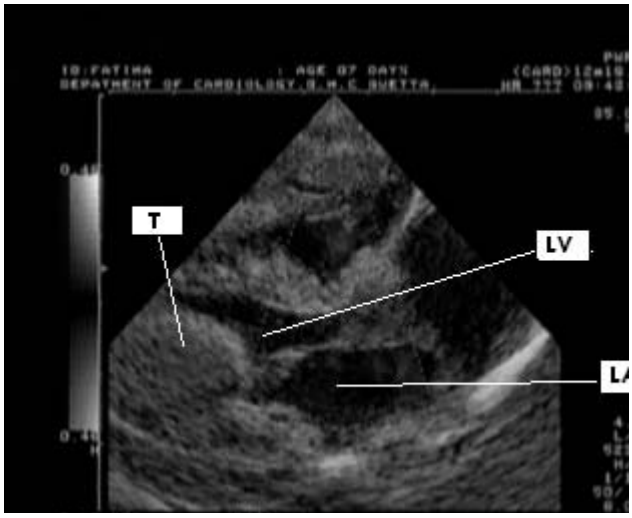

Figure 7 Colour flow tracing in apical view showing TR because of the mass interfering with tricuspid valve movement