Medical Journal of the
Islamic Republic of Iran

Volume 3
Number 1,2
Bahar & Tabestan 1368
Spring & Summer 1989

RIGHT ATRIAL MYXOMA

A.R. NIKYAR, M.D.

From the Shahid Chamran Heart Hospital, Isfahan University of Medical Sciences, Isfahan, Islamic Republic of Iran.

ABSTRACT

A case of right atrial myxoma in a 5 year old male is presented. The patient was admitted in the pediatric department with systemic manifestations. Myxoma was incidentally diagnosed.

MJIRI, Vol.3, No1&2, 87-89, 1989

INTRODUCTION

Right atrial myxoma is a rare cardiac tumor, especially in childhood.

This is an interesting case because of the following features:[1,]

A) Atrial myxoma in childhood.
B) Right atrial myxoma.
C) Sex of the patient.

CASE REPORT

A 5 year old boy was admitted to the children's ward because of fever, palpitation and fatigueof 2 months' duration. On examination, hapatomegaly and peripheral edema was present. Chest X-ray and ECG were normal.

Laboratory tests showed albuminuria and elevated ESR. On one occasion a late diastolic murmur was heard, following which echocardiography was carried out. It showed a mass in the right atrium (Figs. 1,2,3). Other members ofthe family were normal. The patient was referred to the cardiac surgeon with a diagnosis of right atrial myxoma, which was successfully removed and the patient recovered completely.

DISCUSSION

Although primary tumors of the heart are uncommon, about half of them are myxomas.[4] The majority occur between the ages of 30 and 60 years.[1,2] Less than 10 percent of patients with cardiac myxoma are under 15 years of age.[4] Children have a higher incidence of ventricular myxomas than adults, and myxomas in

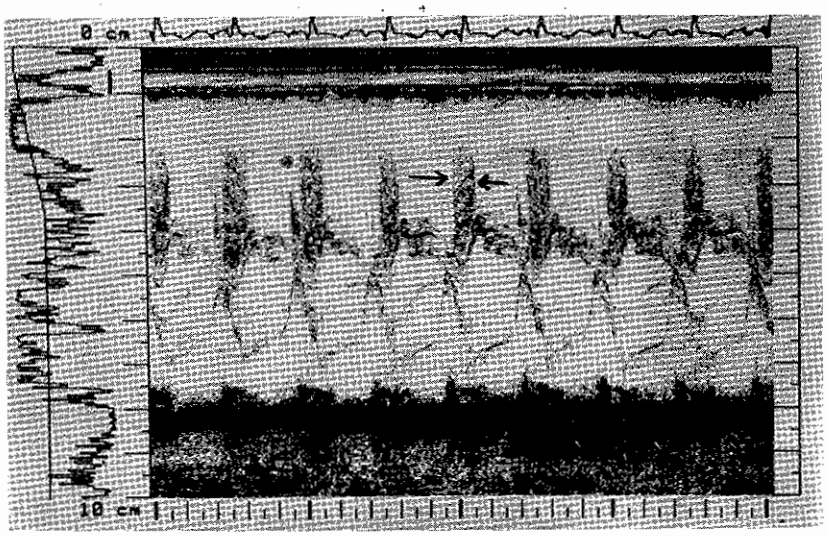

Fig.1. M-mode echocardiogram showed a large tumor mass (arrow) that came to the right ventricle in diastole

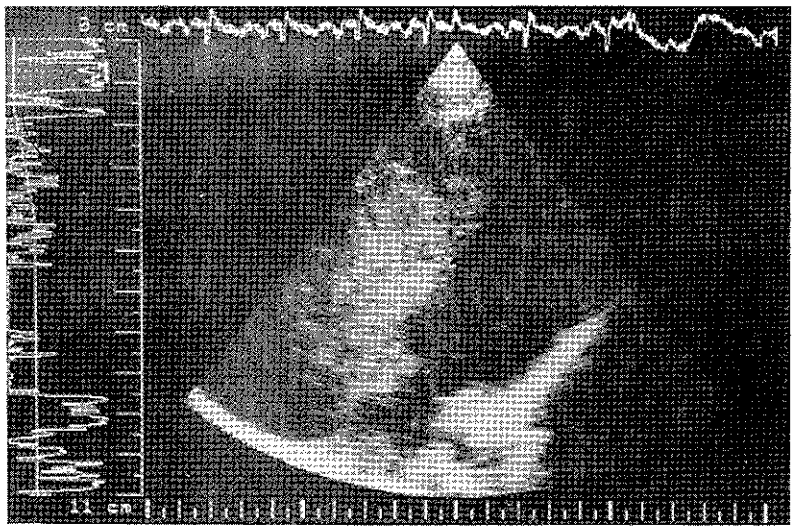

Fig.2. Two- dimensional echocardiogram, apical four chamber view, showing a large right atrial myxoma obstructing the tricuspid valve.

general are more common in the female. While most (75%) are located in the left atrium, myxomas are also found in the right atrium (10%).[2] The clinical signs and symptoms produced by cardiac myxomas include nonspecific manifestations, embolization, and mechanical interference with cardiac function.[5,6,7] Right atrial myxomas frequently produce symptoms of right heart failure, including fatigue, peripheral edema, ascites, hepatomegaly, and prominent "a" wave in the jugular venous pulse. With the exception of ascites, all of these symptoms were present in this patient. Patients with right atrial myxoma may present with a systemic illness, as in this case. Systemic symptoms include recurrent fever, weight-loss, arthralgia, anemia, and elevated ESR.[2,]

combination with a holosystolic murmur secondary to tricuspid regurgitation may be heard. This may demons trate respiratory or positional variation.

Echocardiography is a very important method in establishing an objective diagnosis of cardiac myxoma.[3] M-mode echocardiography demonstrates a right atrial myxoma as a mass of reflected echoes, which moves during the cardiac cycle (Fig.l). Increased accuracy can be obtained by two-dimensional echocardiography, by means of which the size and shape of the tumor can be determined (Figs. 2,3). The technique is so accurate that it in itself provides sufficient information to proceed with surgical correction without angiocardiography.[3] Removal of intracavitary myxoma is a standard procedure with predictable results.

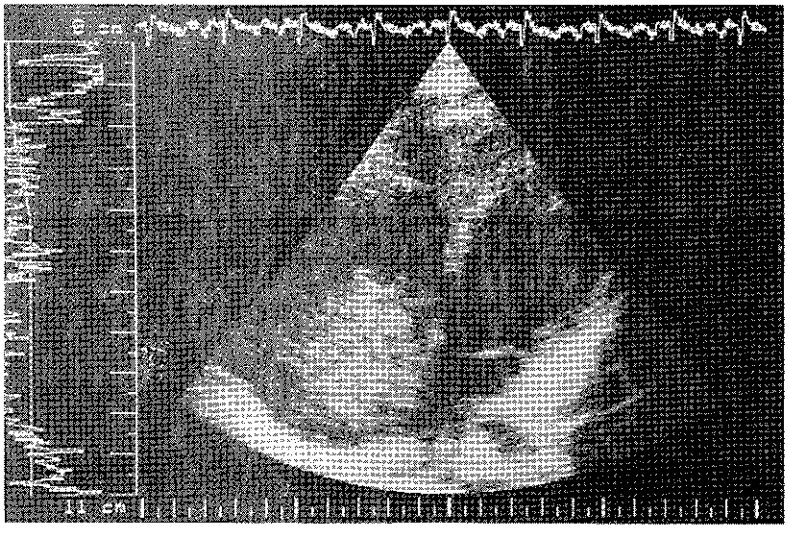

Fig.3. 2-D echo, apical four chamber view. The mass came to the right ventricle in diastole via the tricuspid valve.

REFERENCES

1- Colucci WS, Braunwald E: Primary tumors of the heart. In: BraunwaldE(ed), Heart Disease. Philadelphia: Saunders, 1470-83, 1988.

2- Hall RJ, Cooley DA: Neoplastic Heart Disease. In: Hurst JW (ed), The Heart. New York: McGraw Hill Book Company, 1284-1305, 1986.

3- Sabiston DC Jr:Tumors of the heart. In: Sabiston DC Jr.(ed), Gibbon's Surgery of the Chest. Philadelphia: Saunders, 1585-92, 1983.

4- Ewards JE:Cardiac tumors. In: Adams FH, Emmanouilides GC(eds), Heart Disease in Infants, Children, and Adolescents. Baltimore: Williams and Wilkins, 741-7, 1983.

5- Riemenschneider TA: Tumors of the heart. In: Behrman RE, Vaughan VC (eds), Nelson Textbook of pediatrics. Philadelphia: Saunders, 1030-2, 1987.

6- Sokolow M, McIlroy MB:Miscellaneous forms of heart disease: cardiac tumors, hypotension, neurocirculatory asthenia, & traumatic heart disease. In: Sokolow M, McIlory MB (ed), Clinical Cardiology. Los Altos: Lange Medical Publications, 609-16, 1986.

7- Roguin N, Amikan S,Riss E: Prolapsing right atrial myxoma: clinical and haemodynamic considerations. Br Heart J 39:577-80,1970.