

TUMORS OF HEART : ATRIAL MYXOMA - A CASE REPORT

Shelly Divyadarshan¹,

Chaitra S²,

Alka Jayavanth Kumar³

¹ Associate Professor ²Assistant Professor, ³ professor, Department of Shareera Rachana, JSS Ayurveda Medical College Mysore.

ABSTRACT

The Atrium are upper receiving chambers of heart developed from sinus venosus during development of heart. During this phase of development an entrapped foregut between atrium and ventricles causes growth inside atrium and ventricles, this is called as cardiac myxoma . This may lead to various occlusive disorders of Heart causing acute and chronic Cardiac, Respiratory symptoms and death, these symptoms may also miss lead doctors. One such case was encountered during routine dissection of UG at JSS Ayurveda Medical College Mysuru, same is being reported.

Keywords cardiac myxoma, tumors, obstructive.

INTRODUCTION

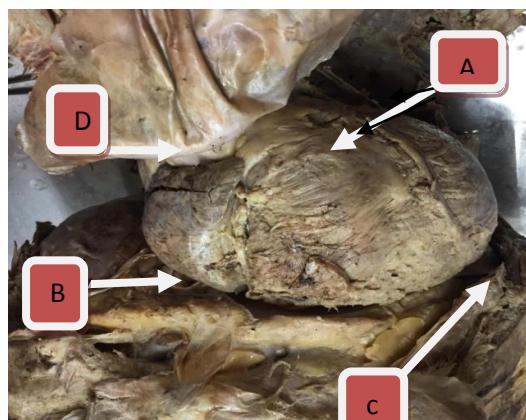


Image 1. External surface of enlarged Heart with Cardiac Myxoma .

A. Base. B. Rt Atrium. C. Apex
D. Pericardium

Myxomas are the most common primary cardiac neoplasm. The prevalence of cardiac tumors at autopsy ranges from 0.001% to 0.3%, more than 50% of benign cardiac tumors are myxomas.(2) In 7%, it has genetic origin and rises as a component of a heritable disorder with some clinical manifestations. Over 72% of primary cardiac tumors are benign. In adults, the majority of benign lesions are Myxomas (2) In most cases, myxomas are solitary, but in their familial form, they can be multiple and recurrent.(3).

Myxomas occur most often in patients aged 30 to 70, in women, and in families with a tendency to develop myxomas.

About 85% of myxomas occur in the left atrium, 10% in the right atrium, and 5% in the ventricles. (5)

Five percent of patients have more than 1 myxoma or a polycentric myxoma. A common site of attachment for atrial myxomas is the fossa ovalis region of the septum; another is the posterior atrial wall.(5)

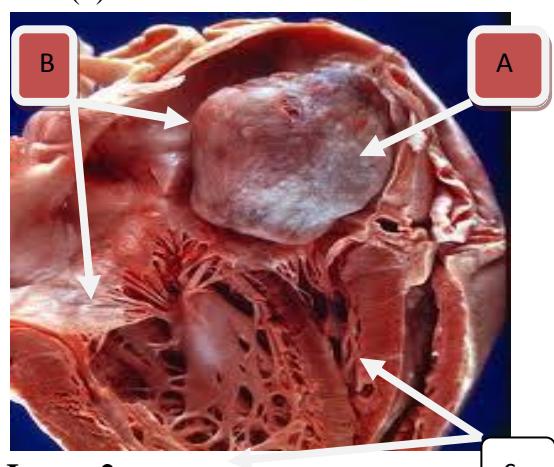


Image 2

A. Atrial myxoma. B. Atriums.C. Ventricles.

CASE REPORT:

During routine UG dissection of 60 year old cadaver in JSS Ayurveda medical college Mysore, a smooth pedunculated

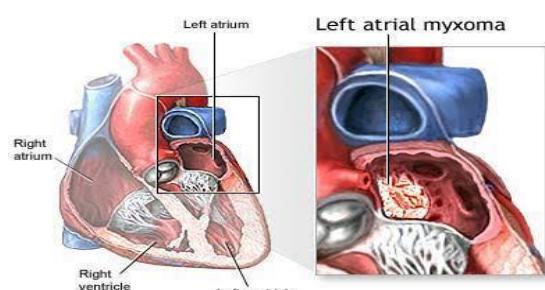
growth extending from Rt atrium of the heart was seen.



Image .3. Lt atrium with myxoma during dissection class.

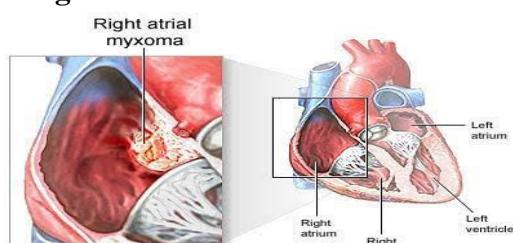
Similar growth was observed in Lt atrium and it was also extending into Lt ventricle. Same Unusual and rare presence of Tumor measuring 5.5 Cms was noticed after incision was

Image .4



taken to open Rt atrium, during dissection is being reported here .It is observed that it extended through the atrioventricular orifice into Rt ventricle and covered major portion of Rt ventricle. Similarly the tumor present at Lt atrium measuring 5 Cms extended through atrio ventricular orifice and stretched into Lt ventricle,

Image .5



these tumors were villous,or friable in nature very smooth to touch.



Image .6 Rt Atrial myxoma removed to show its length

DISCUSSION : It is intrusting to know that we get reference of *Gulma* (lump / tumors) in Ayurveda also in **5th chapter of chikitsa sthana of charaka samhita**,(4)but when it comes to tumours of heart very less has been mentioned . *Hridaya ,Basti, Nabhi* and *Parshwa* are considered as five *Gulmasthanas* but nothing specific has been mentioned about *Gulmas* present at *Hridayasthana* or as *HridayaGulmas*. But it is intrusting to know from **sloka number 8 Cha, chi**, that they had some information about *Gulmas* of *Hridaya* region. (4) When pondering over tumors of Heart in contemporary sciences, it is observed that origin of these tumors can be explained through different theories. myxomas are currently thought to originate from entrapped embryonic foregut, and hence they are derived from multipotent mesenchymal cells capable of both neural and epithelial differentiation. Histologically, these tumors are composed of scattered cells within a mucopolysaccharide stroma.(2) myxomas produce vascular endothelial growth factor (vegf), which probably contributes to the induction of angiogenesis and the early stages of tumor growth .



Image .7

Lt atrial myxoma removed to show its length
On a macroscopic level, typical myxomas are pedunculated and gelatinous in consistency; the surface may be smooth, villous, or friable. Tumors vary widely in size, ranging from 1 to 15 cm in diameter, and weighing between 15 and 180 g. about 35 percent of myxomas are friable or villous, and these tend to present with emboli. Larger tumors are more likely to have a smooth surface and to be associated with cardiovascular symptoms [5].

Although benign, atrial myxomas are potentially lethal because of their location. Incomplete obstruction of the valve opening can result in pulmonary oedema. Repeated motion of the tumor through the valve may also result in valve damage with chordal rupture. Temporary complete obstruction can result in syncope or sudden cardiac death. Growth of atrial myxomas has been postulated to be fast, at a rate of 0.49cm/month.(1) Hence, prompt detection and early resection is potentially life-saving

CONCLUSION : In present scenario the cardio vascular disease are considered as the most fatal diseases as it is the cause for majority of death in india in day today life. Hence it very much essential for family physicians and cardiologist to think from point of view of cardiac tumors as well, as it will also cause similar or more fatal Cardiac and Nervous system complication when miss diagnosed.

Atrial myxomas produce 3 types of clinical presentation: obstructive, constitutional, and embolic.(5) Obstruction mimics mitral and tricuspid valve disease and occurs due to blockage of the atrioventricular valves. In such cases, left atrial myxomas can cause dyspnoea or left heart failure, leading to the mistaken diagnosis of mitral stenosis.(5)

During regular UG dissection class, abnormal growth was observed at both atriums of heart, which attracted towards publishing this research paper. There are many other related symptoms produced due to Cardiac Myxoma as this influences functioning of many systems like NS, CVS, RES etc. There fore, better knowledge of cardiac Myxoma becomes very important for early and précis diagnosis and relevant treatment of cardiac related disease.

REFERENCES

1. Chest journal, official publication of American college of chest physicen. ([https://journal.chestnet.org/article/S0012-3692\(16\)57562-X/fulltex](https://journal.chestnet.org/article/S0012-3692(16)57562-X/fulltex))
2. Cardiology research journal, (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5358296/>)
3. An International Journal of Medicine, Volume 109, Issue 9, September 2016, Pages 623–624, (<https://doi.org/10.1093/qjmed/hcw106>)
4. Charakasamhitachikitsasthana 5 th chapter . (Gulmachikitsa).
5. Journal of taxes institute of Heart (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1336732/> 1/7)
6. Davidsons principle s text book of general medicine.

Corresponding Author: Dr Shelly Divyadarshan, Associate Professor Department of Shareera Rachana, JSS Ayurveda Medical College Mysore.
Email: ethron1724@gmail.com

Source of support: Nil Conflict of interest:
None Declared

Cite this Article as :[Shelly Divyadarshan et al: Tumors of Heart : Atrial Myxoma, A Case Report]
www.ijaar.in : IJAAR VOLUME IV ISSUE VII MARCH-APRIL 2020 Page No: 793-795