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Case Report Open Access

# Echocardiographic Finding of Non-Obstructive Fibromuscular Band in Right Atrium

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## Introduction

The purpose of this case report was to present an echocardiographic finding of non-obstructivefibromuscular band in Right atrium dividing RA in to two chambers.patient was referred to Gujarat Adani Institute of Medical Science for management of systemic Hypertension. We have come across a fibromuscular band in right Atrium a patient in whom we carried out Transthoracic echocardiography for hypertension.

## Case Report

Male aged 28, was referred to our medical out door for control and management of Hypertension. This patient was asymptomatic and was having active life. His family history did not revealed cardiovascular disease and no known causes of premature sudden cardiac death among close relatives. Neither he had undergone any surgeries or treatment in past. He had no relevant past medical history and physical examination was normal. His systemic blood pressure in right radial artery in sitting posture was 180/100 mmHg. Resting 12-lead electrocardiogram was normal All his serum chemistry related to Renal Function, s. uric acid, fundus examination, Renal Arterial Doppler VMA examination Chest X-Ray was normal. His ultra sonography examination was normal. His Fasting Blood Sugar and Postprandial Sugar were normal. Serum Lipid Profile, Homocystine, collagen work up was normal.2 –D Echocardiogram showed Right atrium divided into two chambers by an incomplete fibromuscular band, a thin incompete diaphragm in all echocardiographic views. The Tricuspid valve appeared mildly dysplastic with no regurgitation. Pulmonary artery pressure was estimated to be 20 mmHg. The patient was asymptomatic. Suspected diagnosis of non-obstructive cortriatriatum was suspected. Patient did not have any signs of right ventricular dysfunction or Right ventricular enlargement [1-10]. His left side of heart i.e. Left Atrium, Left Ventricle, Mitral valve, Inter Atrial Septum and Pulmonary veins were normal. Aorta, interventricular septum and Aortic valves didnot show any congenital abnormalities. Thus diagnosis of isolated non-obstructive Fibromusclar band in RA was confirmed (Figure 1).

Cortriatrium was first time was seen in 1868.It is a congenital anomaly in which the left atrium or right atrium is divided into two chambers by a fold of tissue, a membrane or a fibro muscular band., The upper part of the corresponding atrium receives venous blood, whereas the lower portion is in contact with the atrioventricular valve The membrane that separates the atrium into two parts may be a complete imperforated band or may have one or more holes for blood to pass [11-20]. Cortriatriatum sinister is a congenital heart defect characterised by a fibro muscular membrane in left atrium. Where as in Cortriatrium dexter Right atrium has fibro muscular bandit is diagnosed in paediatric age group of patients.and adult cases are extremely rare.Symptoms will depend on the type and degree of obstruction like Tricuspid stenosis. The membrane may be complete or may contain one or more opening of varying size. It can be treated surgically and has no medical treatment. Other congenital conditions like tetralogy of Fallot, double outlet right ventricle, coarctation of the aorta, partial anomalous pulmonary venous connection, persistent left superior vena cava with unroofed coronary sinus, ventricular septal defect, atrioventricular cushion defects and common atrioventricular canal., Asplenia or polysplenia have been reported in adults. In adults, cortriatriatum is frequently an isolated finding (Figures 2 and 3) [21-30].

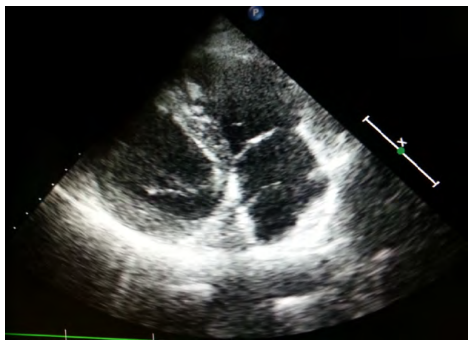

**Figure 1:** Apical 4 CH view which shows fibromuscular band in RA.

## Conclusion

This case suggest the increasingly frequency of diagnosis of adults with congenital heart disease due to availability of 2D Echocardiography

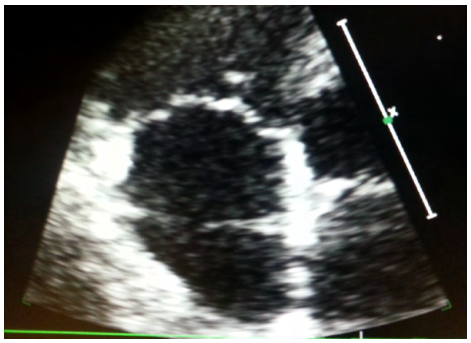

**Figure 2:** Selective two chamber view with rotation of transduer shows band with whole in bandin.

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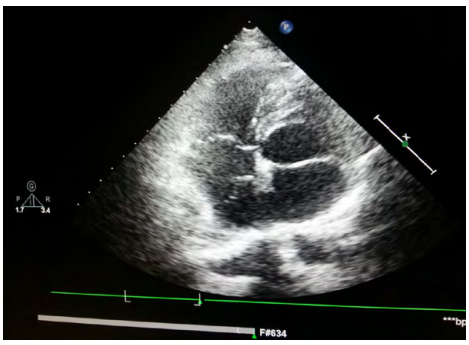

**Figure 3:** Apical 4 CH view shows band in RA in incomplete form.

even in asymptomatic patient. Adult cases of congenital heart disease are mainly found through echocardiographic examinations. It leads to questions for further research, whether to call it Cortriatrium dexter or not? IT was an important and rare disease which was diagnosed accidentally [31-41].

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