



Case report

Left atrial band confused with cor triatriatum sinister

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A 22-year-old female patient was admitted with complaints of dyspnea on exertion for 3 years. Cardiac examination of the patient in physical examination was normal. ECG was normal. Transthoracic echocardiography (TTE) revealed normal for valve structures, heart chambers, and the LV systolic and diastolic parameters. However, a band-like structure was observed in left atrium (Fig. 1). A band-like structure was observed extending from interatrial septum to the lateral wall of the left atrium in the transesophageal echocardiography (TEE) performed for a more detailed analysis of the left atrium (Fig. 2). A defect was not detected on this structure which was considered as differential diagnosis of a membrane seen in cor triatriatum sinister. In addition, colour Doppler examination did not show turbulent flow in the left atrium (Fig. 3), and there were no gradients in CW and PW examinations. Left atrial band (LAB) is a rare congenital anomaly. Although the incidence of congenital LAB was reported to be 2% in clinico-pathologic study,¹ the number is quite low for echocardiographic examinations. LAB has been studied and shown to be in association with Chiari's network, patent foramen ovale, and mitral valve prolapse; however, it is commonly recognized as a benign entity.² The band appearance can also be seen because of suture line after operations like transplantation with biatrial anastomosis. Our patient had no history of surgery. LAB is not uncommon in TTE examination in which left atrium band and cor triatriatum sinister are confused. In discrimination of the two, the defect on this structure with TEE; turbulent flow in the left atrium in colour Doppler; and gradients in CW examination are important discriminants between the two.

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Case report

In our case, 22-year-old female patient was admitted to our department with complaints of dyspnea. We detected LAB with TTE incidentally and then confirmed with TEE. It can be confused with cor triatriatum sinister, if it does not examine carefully.

Differential diagnosis

Cor triatriatum sinister.

Imaging diagnosis

LAB can be diagnosed with TTE and TEE.

Treatment

LAB is an anomaly that does not require treatment. However, the treatment of cor triatriatum sinister is surgery.

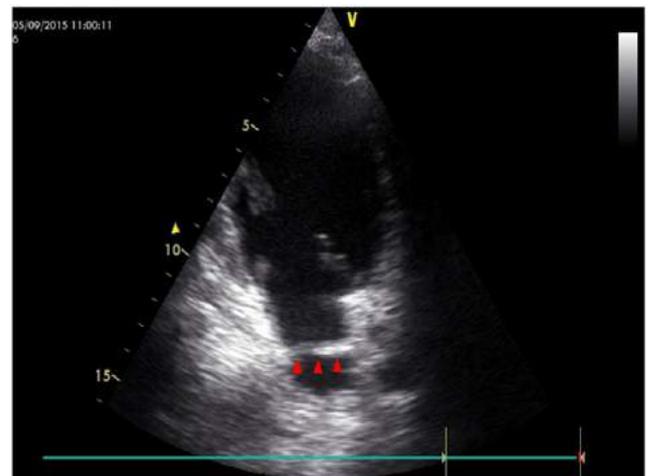


Fig. 1. Transthoracic echocardiogram showing left atrial band (arrowheads).

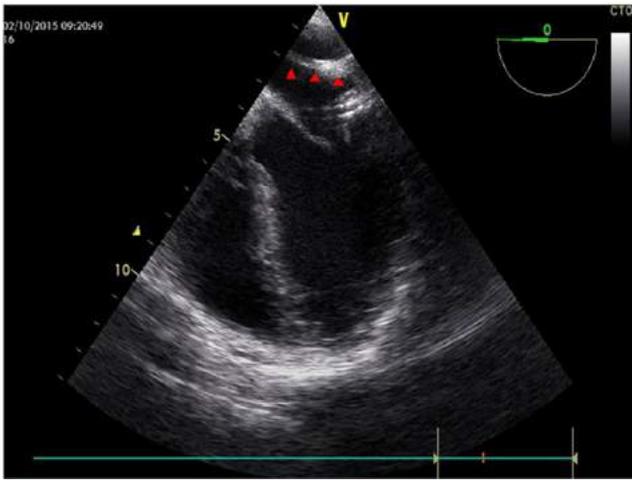


Fig. 2. Transesophageal echocardiogram demonstrating left atrial band extending from interatrial septum to the lateral wall of the left atrium (arrowheads).

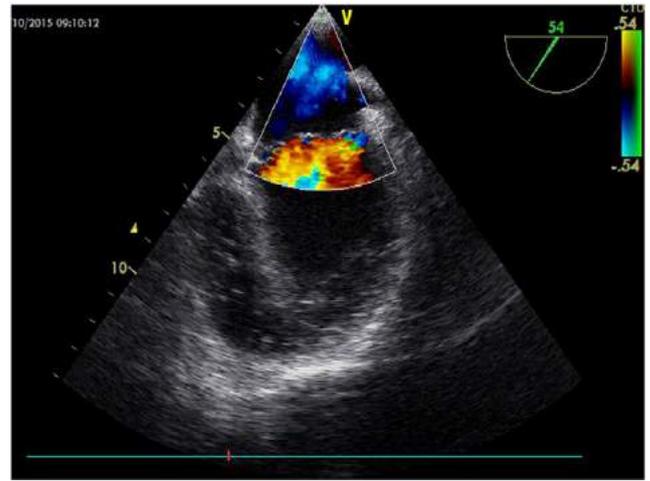


Fig. 3. Colour doppler examination is not showing turbulent flow in the left atrium.

Related reports

Few cases have been reported in the literature about the LAB. But, there is no article about discrimination by cor triatriatum sinister.

Experiences and lessons

It is not uncommon in TTE examination that left atrium band and cor triatriatum sinister are confused. In discrimination of the two, the defect

on this structure with TEE; turbulent flow in the left atrium in colour Doppler; and gradients in CW examination are important discriminants between the two.

References

1. Yamashita T, Ohkawa S, Imai T, et al. Prevalence and clinical significance of anomalous muscular band in the left atrium. *Am J Cardiovasc Pathol* 1993;**4**:286–293.
2. Ozer O, Sari I, Davutoglu V, et al. Cryptogenic stroke in two cases with left atrial band: coincidence or cause? *Eur J Echocardiogr* Mar 2009;**10**(2):360–361.