

Left Atrial Myxoma: Report of A Case Observed in A Child Six Years of Chu Brazzaville

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Abstract

The left atrial myxoma is a rare tumor in children. We describe a case of left atrial myxoma in a 6 year old girl discovered at the balance sheet of a recurrent cough. The presence of cardiomegaly on chest radiograph motivate a specialist consultation, the diminishing of which will be noted the presence of mitral insufficiency murmur intensity 3/6 auscultation and echocardiography mass ovoid, left atrial appendage, pendant to the septal wall, trained in the ventricle in diastole and systole annoying in the closure of the mitral valve, creating a mitral regurgitation grade 3 surgical resection will be conducted in France, with an absence of postoperative recurrence at two years.

Keywords: Myxoma; Left atrium; Mitral regurgitation; Child

Introduction

Myxomas, the most common benign primary cardiac tumors in adults and rare in children. We reported about a case which was observed in the pediatric ward of Chu Brazzaville.

Observation

Lin, a 6 year old girl, had been addressed in pediatric cardiology consultation Chu Brazzaville for the balance of cardiomegaly. She showed no family history of heart disease or tumor and her parents were peasants.

In consultation received surgery for suspected bilateral inguinal hernia in a periphery of the health center south of Brazzaville. Lin was sent to the service of major endemic diseases and pediatrics because of chronic cough with palpitations. During the review made in this center symptom showed: a heart murmur and cardiomegaly, that suggest a specialized pediatric cardiology consultation.

On admission, the child was in good condition but with low-grade fever (37.8°C); her weight was 17.5 kg and the length of 121.5 cm. Bulging of the left hemi thorax was noted in the review, with scars all over perished mammelonnaire left area, reflecting the transition from a traditional therapist. The shock of peak was visible in the 4th -5 th left intercostal space. The liver was not palpable. The heart sounds were well received, regular 90 beats per minute, systolic murmur 3/6 peeping intensity was seen at the tip with a left axillary irradiation. The blood pressure was 90/60 mmHg in both arms. Pulmonary auscultation was normal. It also noted a bilateral inguinal hernia.

The remainder of the physical examination was unremarkable.

Chest radiography effectively enabled noted cardiomegaly V3 (RCT 0.63).

In echocardiography was observed hyper echoic mass oval \pm 31.4 mm in the left atrium, fixed to the lower 1/3 of the inter atrial septum (Figure 1), movable, driven in the ventricle in diastole left (Figure 2), hindering the closure of the anterior mitral valve in systole and resulting in mitral regurgitation grade 3. The left ventricle and the left atrium was dilated (DVG d 44.7 mm 32.8 mm OG). A tricuspid regurgitation velocity 230.3 cm/s is a Gr P 21.3 mmHg was observed right. The pulmonary artery pressure was estimated at 31 mmHg.

A myxoma was suspected in this tumor in the left atrium. An electro cardiogram performed allowed to note sinus tachycardia at 120 per minute, a block incomplete right branch with a negative T wave (right ventricular overload moderate), a bi atrial hypertrophy. The erythrocyte sedimentation rate was near normal (20 mm in the first hour, 35 mm for the second time); the blood count revealed the presence of microcytic hypochromic anemia (hemoglobin 10.3 g/dl, MCV 70 μ m³). The HIV serology and hepatitis B made in the context of a health transfer for removal of this tumor were negative. A health transfer to France had been achieved through the Chain of Hope, (French NGO) and child operated in the pediatric cardiac surgery department of Necker Infants Malades hospital group. The postoperative will be simple.

The operative report account- reported, excision of a very large



Figure 1: Large tumor in the left atrium.

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Received June 13, 2015; Accepted July 04, 2015; Published July 06, 2015

Citation: M'pemba Loufoua- Lemay AB, Tsila R, Nika ER (2015) Left Atrial Myxoma: Report of A Case Observed in A Child Six Years of Chu Brazzaville. J Vasc Med Surg S1: 006. doi:10.4172/2329-6925.S1-006

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Figure 2: Large tumor in the left atrium, mobile, driven in diastole in the left ventricle.

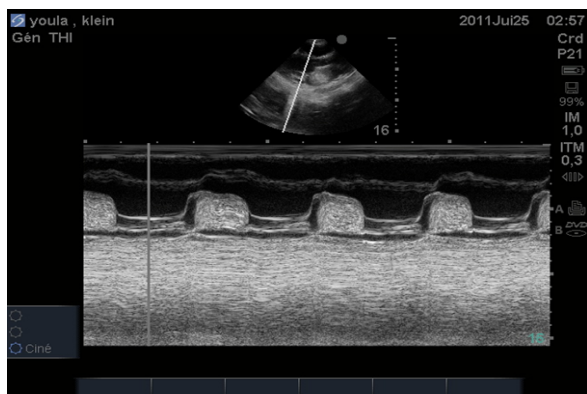


Figure 3: Landlocked tumor in the mitral.

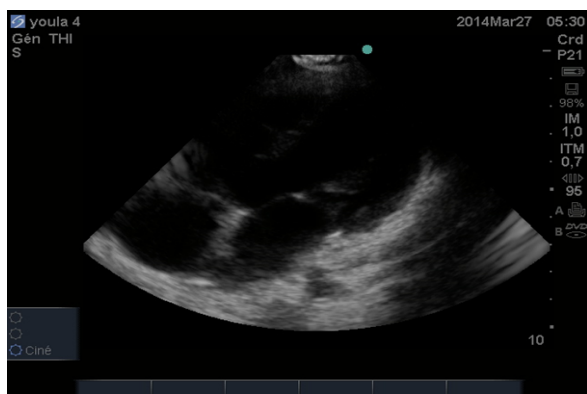


Figure 4: Left atrium after tumor removal.

left atrial myxoma located on the inter-atrial septum. Macroscopically complete resection. The Mitral valve was dysplastic, probably by friction myxoma on sheets.

Pathological examination of the surgical specimen specify the nature of the levy: it was a 17g lesion and $6 \times 3.5 \times 1.5$ cm. It was a polypoid lesion, lobulated, gelatinous. Basically, the sampling interested pellet infarction 1.5×2 cm. On microscopic examination,

there was a polypoid lesion whose axis consisted of very loose myxoid tissue, sometimes seat reshuffles hyaline sclerosis. There was also some bleeding and ischemic remodeling shuffles. Cellularity was made of fusiform or stellate cells lacking atypia. We watched a few cells multinucleated. The base of the lesion was located on the myocardial wall. In this area of implantation, there was fibrous remodeling and congestive.

Conclusions

Excision of a left atrial myxoma seat ischemic and hemorrhagic alterations. On his return to Brazzaville, the child was revised in consultation. Sternotomy scar was beautiful; heart sounds were regular at 88 beats per minute with sporadic extrasystoles without perceptible breath. A echocardiography the left atrium was normal looking, mitral valve dysplasia was still elusive but not (Figures 3 and 4). Review at 33 months postoperatively, Lin had a good condition, his heart rate was 80 beats per minute, with no added on noise, without rhythm disorder. Blood pressure was normal (100/60 mmHg). At echocardiography, mitral valve dysplasia remained with minimal mitral regurgitation, the left atrium and the left ventricle were of normal size. There was no sign of recurrence of myxoma.

Discussion

Cardiac myxoma is rare, it is the most common cardiac tumors in adults in whom they represent more than half of benign primary tumors intra cardiac [1], they are rarely found in children [2,3]. They represent 0.5 to 1% of soft tissue tumors, and are constituted by mucosal tissue [4]. Seventy-five percent of tumors are localized in the left atrium [5] as observed in our patient. The right atrial localization is rare, found in 15-20% of cases of myxoma [6], left ventricular localizations have been described in the literature [3].

Many cases are sporadic, and a small number is the result of an autosomal dominant. The clinical expression is polymorphic. The gravity falls within its sometimes lethal complications [7]. Clinical signs are determined by the location of the myxoma, size and mobility [8]. It can manifest as a valve dysfunction (mitral obstruction) as was observed in our patient in whom the anastomosis of the tumor in the left ventricle bother closing the mitral (Figure 2), creating a mitral insufficiency translating itself clinically by a characteristic systolic murmur. This dysfunction can be the cause of left ventricular failure as observed by other authors [4].

The recurrent cough and palpitations that our patient had complained certainly due to this mobility of the tumor. The low-grade fever, increased though modest speed of blood sedimentation and hypochromic microcytic anemia showed the presence of an inflammatory syndrome. Indeed, Voluminous forms are manifested by at least one of the clinical triad including the achievement of the general state, embolic accidents and syndromes or cardiac valvular obstructions cavity. The Chest pain caused by coronary emboli [8] and syncope [3,4] were not observed in our patient.

Asymptomatic forms have been described [8], which can be revealed by sudden death. Echocardiography has enabled the diagnosis by revealing the tumor of the atrium and specifying its mobility. The excision of the tumor under extracorporeal circulation has allowed the healing of our patient. Indeed, this excision outweighs the entire tumor, including the insertion based on the inter atrial septum to prevent recurrences as has been done for our patient. Indeed, long-term, there is a risk of recurrence estimated at 1 to 5%. The pathological anatomy brings certainty histological examination.

Conclusion

The left atrial myxoma is a rare tumor in children. Benign primary cardiac tumor, its mode of revelation is variable, it can cause serious complications that can result in death. Ultrasound can make the diagnosis. Treatment consists of surgical excision and histological examination of the surgical specimen confirmed the diagnosis. The ultrasound monitoring allows to detect any recurrence.

References

1. MacGowan SW, Sidhu P, Aherne T, Luke D, Wood AE, et al. (1993) Atrial myxoma: national incidence, diagnosis and surgical management. *Ir J Med Sci* 162: 223-226.
2. Nadas AS, Ellison RC (1968) Cardiac tumors in infancy. *Am J Cardiol* 21: 363-366.
3. Kumar P, Garg A (2011) Left ventricular myxoma in a child: a case report. *Eur J Echocardiogr* 12: E23.
4. Rakotoarimanana S, Rapanarilala JR, Rakotomizao JR, Randria MJD, Rajaonarivelo P, et al. (2006) Myxome de l'oreillette gauche: une cause rare d'insuffisance cardiaque. *Med Afr Noire* 53-4: 247-251
5. Batisse A, Fermont L, Lévy M (2013) *Cardiologie pédiatrique pratique : tumeurs bénignes*. Paris : Doin.
6. Souaga A, Kathe E, Ekou A, Amani A, Kirioua-Kamenan A, et al. (2012) Myxome de l'oreillette droite révélé par des pseudo-syncope: à propos d'un cas opéré à Abidjan *Med Afr Noire* 59: 70-72
7. Mariano A, Pita A, León R, Rossi R, Gouveia R, et al. (2009) Primary cardiac tumors in children: a 16-year experience. *Rev Port Cardiol* 28: 279-288.
8. Kaneko T, Walkes JC, Tsai FW (2011) Left atrial myxoma in a child with unique presentation: chest pain. *Pediatr Cardiol* 32: 230-231.

This article was originally published in a special issue, **Vascular Medicine and Vascular Surgery** handled by Editor(s). Dr. Edel P Kavanagh, Galway Clinic and University College Hospital Galway