Pediatric Left Atrial Myxoma: 
Surgical Excision and Mitral Valve Plasty

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This report describes the case of a 12-year-old girl with a giant left atrial myxoma who presented with severe mitral regurgitation symptoms. Echocardiography demonstrated a 69×30 mm solid mass in the left atrium (LA), occupying almost the entire mitral orifice. After successful surgical excision of the tumor, concomitant with mitral valve plasty, there was no clinical or echocardiographic recurrence at 12-month follow-up. (Ann Thorac Cardiovasc Surg 2007; 13: 65–7)

Key words: left atrium, mitral valve plasty, myxoma, pediatric
Myxomas constitute approximately 50% of primary cardiac tumors in patients of all ages. However, in pediatric patients, they are less common than rhabdomyomas and fibromas. Myxomas occur in all regions of the heart, and may result in compression of cardiac structures, valvular insufficiency, outflow tract obstruction, coronary emboli, and occasionally sudden death. Although mitral insufficiency is common in cases with left atrial myxoma, it can be managed without surgical repair in many instances in adult patients. Conversely, in children, little has been reported about myxoma-related mitral surgery. As all of the valvular apparatus was normal except for annular dilatation, an annuloplasty was the only available procedure for treating our patient’s mitral insufficiency. According to a previous report that mitral insufficiency due to annular dilatation is reversible on long-term follow-up, thus, although our most recent echocardiography showed “trivial” regurgitation,
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Fig. 3. Histologic examination showed polygonal, stellate cells with an abundant acid mucopolysaccharide-rich matrix consistent with a benign myxoma.

Further follow-up is mandatory.

Myxoma can recur in the atrium despite radical resection of the septum.6) It is generally believed that the multigrowth potential of the tumor seems to be more important than inadequate surgical resection, as a determinant of recurrence.7) Fortunately in this patient, careful inspection during surgery confirmed no other tumor presence. Because the reported time interval between the initial excision and reoperation ranges from 6 months to 12 years,8) periodic echocardiographic examinations will be necessary to monitor for recurring myxoma after resection.

References