Ten years' clinical experience of cardiac myxoma: diagnosis, treatment, and clinical outcomes

To the Editor,

Cardiac myxoma (CM) is the most common type of benign primary cardiac tumor (1). Approximately more than half of primary cardiac tumors are myxomas (2). They are most commonly diagnosed between the age of 30 and 60 years (3). CM is described as a sporadic or familiar disorder in the literature (2, 3). A limited number of patients have been referred with the classical triad of obstructive cardiac symptoms: pulmonary edema, progressive heart failure (HF), and arterial embolic events. Rarely, syncope/vertigo or sudden death can be the first symptom of CM. For early diagnosis, transthoracic echocardiography (TTE) is being increasingly used. Recently, magnetic resonance imaging (MRI) and/or thoracic computed tomography (CT) have been used for prompt diagnosis. Early and optimal surgical excisions have shown excellent early- and long-term results, with no recurrence of the tumor (4). According to previous studies, CMs may be diagnosed sporadically in 90% of patients (5).

In contrast to solid myxoma, papillary myxoma is characterized by a soft formation that is friable during tumor excision. Therefore, the rate of tumor recurrence is high in patients with papillary myxoma than in those with solid myxoma (4).

We treated 38 patients with CMs between June 2006 and September 2016 and retrospectively analyzed the symptoms, diagnostic methods, and treatment strategies. Briefly, the mean age of the patients who underwent primary myxoma resection was 41.7±7.8 years, and female/male ratio was 22/16. Two patients with CM were in the pediatric age group (13 and 17 years). We used two-dimensional TTE for the diagnosis of CM in all patients. If tumors other than myxomas were suspected, thoracic CT or MRI was used.

No mortality occurred in the early postoperative period. Three patients required an emergent operation because of HF. In the early postoperative period, we detected a low cardiac output syndrome, new onset of atrial fibrillation, and mediastinal bleeding in 12 patients. Mean ICU and length of hospital stay was 2.7±1.4 and 8.5±3.3 days, respectively. Two patients died at a mean follow-up of 32±13 months postoperatively. Among the 36 long-term survivors, 76% of patients were in NYHA class I, whereas 24% were in NYHA class II. Two patients who underwent left atrial myxoma resection showed a recurrence 33 and 46 months after the first surgery. Congestive HF resulting from obstructive cardiac manifestations was detected in seven patients.

CM can present with a wide range of symptomatic spectrum from being asymptomatic to having serious side effects (4, 5). Our patients with a large solid myxoma that were localized in the left atrium had a greater incidence of HF and obstructive symptoms. In accordance with our experiences, serious proteinuria or acute renal failure which may be the first sign of right atrial myxoma. Peripheral or cerebral artery embolic events are the main catastrophic symptoms related to tumor type and location. After diagnosis is confirmed, early tumor excision should be performed. Surgery has excellent overall survival and freedom from reoperation, but follow-up using TTE is recommended.

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DOI:10.14744/AnatolJCardiol.2017.8265