Atrial myxoma

Atrial myxomas are the most common primary and benign cardiac tumors. They are believed to originate from multipotential mesenchymal cells [1) 2)].

Cardiac myxomas have been rarely reported to have various neurological manifestations including embolic stroke, [3) 4)] intracranial aneurysms and cerebral cavernous malformations (CCM) [5) 6)].

Due to the rarity of the disease, optimal treatment has yet to be determined. It has been reported that myxomatous aneurysms can remain static over 15 years with observation [7)]. Surgical methods are limited by invasiveness especially for multiple recurring aneurysms. Chemotherapy alone has had equivocal results [8)]. Positive results have been reported with whole-brain or focal irradiation followed by chemotherapy [9) 10)].

We report the first case where stereotactic SRT was used alone to treat metastatic myxomatous aneurysms. SRT offers the advantages of being less invasive than endovascular or open surgery, avoids the systemic effects of chemotherapy, and limits toxicity to surrounding brain parenchyma compared to whole brain irradiation.

Atrial myxomas are the most common primary benign cardiac tumors. The embolization of tumor particles is not infrequent, and in nearly half of them, the cerebral arteries are affected, usually leading to embolic ischemic stroke. Formation of intracranial aneurysms, development of parenchymal brain metastasis, and intracerebral hemorrhage due to ruptured aneurysms are rarer. The diagnosis of such lesions in a previously undiagnosed case of myxoma may be challenging for a pathologist. Rajeshwari et al. presented two patients of cardiac myxoma with varied neurological manifestations and their pathological findings [11)].

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