

CORRESPONDENCE

**Cardiac Tumors—Diagnosis and Surgical Treatment**

Prof. Dr. med. Andreas Hoffmeier,  
 Prof. Dr. med. Jürgen R. Sindermann, Prof. Dr. med. Hans H. Scheld,  
 Prof. Dr. med. Sven Martens in issue 12/2014

**Vision Defect Owing to Metastasis**

As an addendum to the diagnostic evaluation of cardiac tumors, especially of metastatic atrial myxoma (1), we wish to add that the eye may also be affected. We reported the case of a 20 year old woman with a history of three years' recurrent, sudden-onset, unexpectedly occurring unilateral vision defects accompanied by headache. The headaches were initially misdiagnosed as migraine attacks. Ultimately, an ophthalmological examination found a recent occlusion of the retinal artery branch. The ophthalmologist organized an echocardiogram and a myxoma in the left atrium was found, which was then successfully surgically removed. In metastatic atrial myxoma, ocular infarctions are common, in addition to cerebral or peripheral infarctions. Many publications have reported on this; the literature includes descriptions of central artery occlusion, cerebral nerve palsy—for example, oculomotor nerve palsy—homonymous hemianopsia, or nystagmus.

DOI: 10.3238/arztebl.2014.0546a

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**Prof. Dr. med. Dieter Schmidt**  
 Universitäts-Augenklinik Freiburg  
 dieter.schmidt@uniklinik-freiburg.de

**In Reply:**

The additional points raised in the correspondence from an ophthalmologist's perspective underlines once more one of the key messages of our study on the most common cardiac tumors—namely, that these tumors can display chameleon-like qualities in the context of their diagnostic evaluation. We did point out the development of potentially fatal embolisms, especially in cases of myxoma. Any embolism that has developed, inde-

pendently of its location, needs to be investigated by histology as well as echocardiography, in order to be able to exclude thrombi, endocarditis vegetations, or cardiac tumors as possible causes. It is well known that 30–40% of all untreated myxomas will embolize, and some investigators have reported such embolizations as the most common clinical manifestation of this gelatinous and friable tumor (1). Myxomas have been reported to be responsible for 0.4% of all cases of stroke. Fundamentally, however, any vascular region may be affected. We are now studying cardiac tumors from three university medical centers—we have not observed a single case of severe embolization into the ocular arteries over 40 years. A PubMed search using the search term “cardiac tumor” identified 42 000 publications; refining the search by adding “retinal occlusion” resulted in 24 individual case reports that described embolizations into the central ocular artery. Because of the serious sequelae of a tumor-related embolism—in whichever area of the body—regular transesophageal echocardiography in the treating center is essential, perioperatively, postoperatively, and in case of any new clinical symptoms.

Schmidt et al. used the term “metastatic myxoma” in the context of embolisms. We are not familiar with the term in this context, but it is used occasionally in the literature in the context of the discussion about potential malignant transformation of myxomas.

DOI: 10.3238/arztebl.2014.0546b

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**Prof. Dr. med. Andreas Hoffmeier**  
**Prof. Dr. med. Jürgen R. Sindermann**  
**Prof. Dr. med. Hans H. Scheld**  
**Prof. Dr. med. Sven Martens**  
 Department für Herz-Thoraxchirurgie, Klinik für Herzchirurgie  
 Universitätsklinikum Münster  
 andreas.hoffmeier@ukmuenster.de

**Conflict of interest statement**

The authors of both contributions declare that no conflict of interest exists.