

Commentary on Rheumatism as a Cause of Cardiac Hemangioma

Ting Xie¹, Xuan Chen^{2*}

¹Department of Cardiac Surgery, Hainan General Hospital, Haikou, China; ²International College of Nursing, Hainan Vocational University of Science and Technology, Haikou, China

DESCRIPTION

We know that cardiac tumors are rare, and cardiac hemangioma is a more rare benign cardiac tumor, accounting for only 2% of primary cardiac tumors. Similar to other hemangioma, cardiac hemangioma mainly originated from the abnormal hyperplasia or dilatation of small arterioles, venules and capillaries, cardiac hemangioma Mainly divided into capillary hemangioma and cavernous hemangioma. The former is mainly composed of small blood vessels, while the latter is mainly composed of large blood vessels [1]. Most cases are asymptomatic and are usually discovered by chance. The cause of this disease is not yet clear, it may be related to genetic factors, infections, trauma, and other factors. Rheumatism is an autoimmune reaction caused by streptococcal infection in the body, which is common in developing countries and an important medical burden for developing countries.

There were an estimated 22,246,127 cases of rheumatism heart disease in the Asian region in 2019 and 249,830 deaths. The prevalence of rheumatism heart disease in the Asian region in 2019 was 9% lower than the global estimate, while mortality was 41% higher. Although the burden of rheumatism heart disease in the Asian region has steadily decreased since 1990, it remains a serious public health issue requiring greater attention. In the Asian region, inequalities in the distribution of the rheumatism heart disease burden remain significant, with economically deprived countries typically bearing a greater share of the load [2]. Rheumatism is an inflammatory and immune disease characterized by symptoms such as joint pain, swelling, stiffness, chest tightness, and shortness of breath. At the beginning, streptococcal infections can cause pharyngitis, rheumatic fever, rheumatoid arthritis, etc., while repeated streptococcal infections can lead to rheumatic heart disease. However, our medical understanding is still unclear whether rheumatism can cause heart hemangiomas. After literature review and analysis, it is preliminarily indicated that there is a certain relationship between rheumatism and cardiac hemangioma. Although there are few reports on cardiac hemangiomas, there have been 5 cases showing a correlation between rheumatism and cardiac hemangiomas. Two male and three female cases, ranging in age from 40 to 73 years old, were all cases of rheumatic heart disease with a single or multiple cardiac hemangiomas, all of which were considered as cardiac tumors or masses before surgery. Some are

found at the hospital due to chest tightness and shortness of breath, while others are occasionally found during physical examinations at the hospital. The symptoms of cardiac hemangioma are related to the location, size, and comorbidities of the hemangioma. If a small cardiac hemangioma is not accompanied by severe rheumatic heart disease, it is generally not easy to detect, these five cases occurring in the epicardial (epicardium), mitral (endocardium), mitral (endocardium), left atrium (endocardium), and right atrium (endocardium), respectively [3-7]. The chronic inflammation and immune response of the heart caused by rheumatism may lead to vascular malformations in the endocardium, myocardium, or epicardium. Additionally, it is worth mentioning that hemangiomas are occasionally found in rheumatic knee joints. We know that joints are one of the important accumulated tissues in rheumatism, further confirming that chronic inflammation and immune responses in rheumatism can lead to hemangiomas, and the accumulated organs are not limited to the heart, but also occur in the main accumulated tissues of rheumatism, such as joints.

Generally speaking, preoperative diagnosis of cardiac hemangioma is difficult through ultrasound/CT/MRI, and postoperative pathological confirmation is currently the gold standard for diagnosis. However, with our proposed etiology, it is possible to diagnose cardiac hemangioma before surgery in the future. Additionally, it is worth mentioning that the current treatment method for the tumor is surgical resection, with satisfactory surgical results and generally no recurrence after resection.

At present, it is widely recognized in clinical diagnosis that rheumatism can lead to hemangioma, so inquiries about rheumatism history are often ignored in cardiac or joint hemangiomas. As a result, some hemangiomas cannot find the cause. Our article establishes a connection and analysis between rheumatism and hemangioma. Firstly, it helps doctors establish a new understanding of the etiology of hemangiomas. Secondly, it helps us make etiological diagnosis of hemangiomas with concurrent rheumatism. Thirdly, when it is difficult to diagnose cardiac tumors, especially when there are abnormal cysts in the heart, it is important to inquire about the history of rheumatism, which may provide us with accurate diagnosis. Fourthly, it helps us to provide precise treatment for patients from the perspective of etiology, such as administering penicillin treatment.

Correspondence to: Xuan Chen, International College of Nursing, Hainan Vocational University of science and Technology, Haikou, China, E-mail: wzchenxuan@163.com

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