



## [ PICTURES IN CLINICAL MEDICINE ]

## Aortic Valve Infective Endocarditis with an Annular Abscess

Naoki Masaki<sup>1</sup>, Takashi Ogasawara<sup>2</sup> and Katsuo Matsuki<sup>2</sup>

Key words: infective endocarditis, annular abscess, atrioventricular block

(Intern Med 56: 2951-2952, 2017) (DOI: 10.2169/internalmedicine.8970-17)



Picture 1.



Picture 3.

A 45-year old man was referred to our hospital because of a fever. His blood culture revealed a *Streptococcus pneumoniae* infection; ultrasound cardiography recorded vegeta-



Picture 2.

tion at the aortic valve. Infective endocarditis was diagnosed, and antibiotic therapy was initiated. Although the infection and heart failure were controlled, at approximately two weeks after the antibiotic therapy initiation, a seconddegree atrioventricular block was observed. Transesophageal echocardiography revealed an annular abscess extending to the non-coronary cusp annulus (Picture 1, 2) that also communicated with the left atrium (Picture 3). We performed abscess debridement, annulus and defect reconstruction with a bovine pericardium patch, and aortic valve replacement using a mechanical valve. The patient recovered without any recurrent infective endocarditis or heart failure symptoms. Even today, annular abscesses are serious complications of infective endocarditis (1). It is important to select an appropriate treatment strategy, including surgical planning, in order to precisely diagnose the existence and extension of the abscess preoperatively.

## The authors state that they have no Conflict of Interest (COI).

<sup>&</sup>lt;sup>1</sup>Division of Cardiovascular Surgery, Tohoku University Graduate School of Medicine, Japan and <sup>2</sup>Department of Cardiovascular Surgery, Hachinohe City Hospital, Japan

Received: January 31, 2017; Accepted: February 23, 2017; Advance Publication by J-STAGE: September 15, 2017 Correspondence to Dr. Naoki Masaki, n.masaki@med.tohoku.ac.jp

## Reference

**1.** Baumgartner FJ, Omari BO, Robertson JM, et al. Annular abscesses in surgical endocarditis: anatomic, clinical, and operative features. Ann Thorac Surg **70**: 442-447, 2000.

The Internal Medicine is an Open Access article distributed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view the details of this license, please visit (https://creativecommons.org/licenses/ by-nc-nd/4.0/).

© 2017 The Japanese Society of Internal Medicine Intern Med 56: 2951-2952, 2017