[PICTURES IN CLINICAL MEDICINE]

Pathology Findings of Coconut Atrium

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Picture 1.

Picture 3.

Picture 2.

Picture 4.

A 75-year-old man was found to have massive calcification of the left atrium (LA), usually reported as “coconut atrium”. It is a rare complication in patients with rheumatic heart disease. He had a medical history of mitral valve replacement for rheumatic mitral stenosis, tricuspid annuloplasty and pacemaker implantation. He had pulmonary hy-

pertension (mean pulmonary arterial pressure: 54 mmHg) with a combined pre- and post-capillary profile (pulmonary artery wedge pressure 34 mmHg, diastolic pressure gradient 4 mmHg, pulmonary vascular resistance: 3.8 WU). He ultimately died of pneumonia, and autopsy imaging with three-dimensional reconstruction of computed tomography was performed, showing impressive spherical calcification of the LA (Picture A). The autopsy further revealed massive calcification at the surface of the LA endocardium (Picture B-D,

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scale bar: 1 mm), and the LA specimen showed abundant elastic fibers, hyperplasia of smooth muscles and a thick layer of hyalinized collagen with sheet calcification. We suspect that the atrial calcification was established from the collagen-rich matrix. A previous report of coconut atrium showed lymphocyte and macrophage infiltration in the LA wall (1), but in the current case, only a few inflammatory cells were seen. Although the mechanism underlying the development of coconut atrium remains unclear, the current case may help in understanding it.

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

Reference

1. Shiba M, Sugano Y, Ikeda Y, Ishibashi-Ueda H, Ohara T, Hasegawa T, et al. Pathohistological Evidence of Smoldering Inflammation in Rheumatic Heart Disease with Massive Left Atrial Calcification. *Internal Medicine* **55** (7): 751-754, 2016.

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