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## Regression of biventricular Loeffler's endocarditis after early treatment

## Sunki Lee, Cheol Ung Choi, Eung Ju Kim, and Jin Oh Na\*

Cardiovascular Center, Korea University Guro Hospital, 148, Gurodong-ro, Guro-gu, Seoul, Republic of Korea, 08308. \* Corresponding author. Tel: 822 2626 1058; Fax: 822 863 1109. E-mail: koolup93@gmail.com

A 30-year-old man visited our emergency room presenting with acute headache and aphasia. He was previously healthy except for smoking habit. Blood test revealed peripheral eosinophilia (46.6%,  $26.4 \times 10^3/\mu$ L) accompany with anaemia (12.5 g/dL) and thrombocytopenia ( $44 \times 10^3/\mu$ L). A brain magnetic resonance imaging showed acute ischemic cerebral infarction in the left posterior middle cerebral artery territory (*Panel A*; arrow). Transthoracic echocardiography (TTE) was performed and highly echogenic organized layer was depicted in the biventricular apex (*Panel B*; yellow arrow heads, and see Supplementary data online, *Video S1*). Intriguingly, his left ventricular ejection fraction was normal without wall motion abnormality. To unravel the cause of eosinophilia, bone marrow biopsy was performed and detected the FIP1L1/PDGFRa chromosomal fusion which suggests clonal eosinophilia. Based on results, diagnosis of clonal eosinophilia associated



with cardiac involvement (Loeffler's endocarditis, LE) was made and we immediately started  $Gleevec^{TM}$  (imatinib) and anticoagulation (warfarin) therapy. After treatment, his eosinophil count normalized within 3 weeks and repeat TTE showed significant resolution of apical thickening in left ventricular apex but still noted in right ventricular apex with hypermobile mass suggesting thrombus (*Panel C*; red arrow head, and see Supplementary data online, *Video S2*). At 3 months, TTE documented complete resolution of biventricular apical thickening without any thrombus burden (*Panel D* and see Supplementary data online, *Video S3*). The patient remains alive and well tolerated with imatinib therapy. This report highlights the importance of early diagnosis and treatment of LE. Furthermore, we suggest typical TTE findings of LE based on treatment courses (before, during, and after treatment) which may enhance our knowledge of this rare disease.

Supplementary data are available at European Heart Journal—Cardiovascular Imaging online.

Conflict of interest: None declared.

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