

Right-sided infective endocarditis of a native valve with multiple embolus lesions

Miyeon Kim, Ki Yung Boo, Jeong Rae Yoo

Department of Internal Medicine, Jeju National University College of Medicine, Jeju, Korea

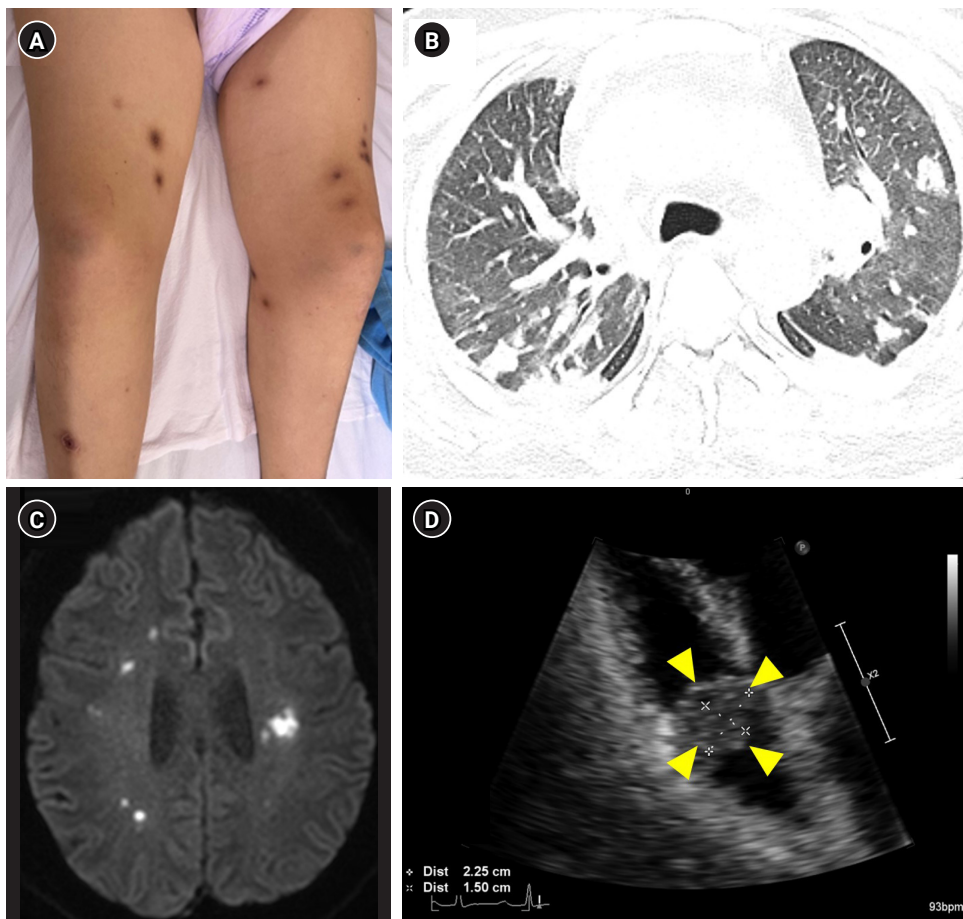


Figure 1. (A) Multiple dot-like black erythematous lesions measuring 1–3 cm throughout the body. (B) Chest computed tomography revealing multiple nodules in both lungs. (C) Diffusion-weighted brain magnetic resonance imaging of lesions with high signal intensity, appearing as multiple scattered dots, in both fronto-parieto-temporal lobes. (D) Apical view of the four chambers on transthoracic echocardiography showing vegetation in the tricuspid valve indicated by yellow arrowheads.

Image in Critical Care

Received: September 22, 2023

Revised: October 24, 2023

Accepted: October 26, 2023

Corresponding author

Jeong Rae Yoo
Division of Infectious Disease,
Department of Internal Medicine, Jeju
National University College of
Medicine, 102 Jejudaehang-ro, Jeju
54987, Korea
Tel: +82-64-717-2286
Fax: +82-64-717-2286
Email: mdyoojr@gmail.com

Copyright © 2023 The Korean Society of Critical Care Medicine

This is an Open Access article distributed under the terms of Creative Commons Attribution Non-Commercial License (<https://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted noncommercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

A 47-year-old man was transferred to our hospital with methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia. On admission, the patient had multiple 1–3-cm-sized black dotlike erythematous lesions throughout the body (Figure 1A). In addition, he had multiple patchy consolidations in both lung fields (Figure 1B) and multifocal dots scattered in both fronto-parieto-temporal lobes (Figure 1C). On the 2nd day of admission, transthoracic echocardiography revealed a 2.25×1.5-cm-sized friable mass in the tricuspid septal leaflet (Figure 1D, Supplementary Videos 1 and 2). MRSA was isolated from the patient's blood and skin lesions. Unexpectedly, no intracardiac shunt was shown on transthoracic and transesophageal echocardiography. Tricuspid septal leaflet repair and mass debridement had been performed in the referring hospital. MRSA was isolated from the debrided mass from the tricuspid valve.

In this case, atypical features were noted. Infective endocarditis occurred on a normal tricuspid valve, and a large vegetation was present, caused by MRSA. He also exhibited clinical signs of systemic embolization, despite the absence of congenital heart disease, central venous catheter use, and drug use, making this case particularly unique and challenging to diagnose and treat [1,2].

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

FUNDING

None.

ACKNOWLEDGMENTS

This study was approved by the Institutional Review Board at Jeju National University Hospital (No. 2023-07-006). The patient provided informed consent for publication of the report.

ORCID

Miyeon Kim <https://orcid.org/0000-0002-0020-3292>

Ki Yung Boo <https://orcid.org/0000-0002-8098-9132>

Jeong Rae Yoo <https://orcid.org/0000-0002-5488-7925>

AUTHOR CONTRIBUTIONS

Conceptualization: JRY. Data curation: JRY, KYB. Formal analysis: JRY. Methodology: JRY, MK. Project administration: JRY. Visualization: JRY. Writing–original draft: MK. Writing–review & editing: JRY.

SUPPLEMENTARY MATERIALS

Supplementary materials can be found via <https://doi.org/10.4266/acc.2023.01228>.

REFERENCES

1. Shmueli H, Thomas F, Flint N, Setia G, Janjic A, Siegel RJ. Right-sided infective endocarditis 2020: challenges and updates in diagnosis and treatment. *J Am Heart Assoc* 2020;9:e017293.
2. Habib G, Lancellotti P, Antunes MJ, Bongiorni MG, Casalta JP, Del Zotti F, et al, ESC Scientific Document Group. 2015 ESC Guidelines for the management of infective endocarditis: The Task Force for the Management of Infective Endocarditis of the European Society of Cardiology (ESC). Endorsed by: European Association for Cardio-Thoracic Surgery (EACTS), the European Association of Nuclear Medicine (EANM). *Eur Heart J* 2015;36:3075-128.