A rare case of Corynebacterium Spp. native mitral valve endocarditis – case report and review of literature

Background: Corynebacteria species are non-fermentous Gram-positive bacilli considered part of a human skin and mucos membranes flora and are commonly isolated in clinical specimens. They are not recognized as common cause of endocarditis.1-3 We report a case of native mitral valve infective endocarditis caused by Corynebacterium spp.

Case report: 45-year-old male with a history of spinal cord injury and paraplegia presented with a 20-day history of fever and fatigue. Before starting antibiotics, multiple blood samples were taken and Corynebacterium spp was isolated. Due to unknown source of infection and a new systolic heart murmur, a transesophageal echocardiography was performed, showing severe mitral regurgitation with two mobile hypoechogenic masses on the anterior and posterior mitral valve leaflets, 11x5 mm and 6x5 mm, respectively. According to antibiogram, vancomycin was administered, and the fever subsided. The patient was transferred to a Cardiac Surgery Department, where he underwent mitral valve replacement (On-X M 25/33). The resected vegetation was culture-negative. Postoperatively, pericarditis was performed due to increasing pericardial effusion. Afterwards, the patient was discharged and presented free of infection and without pericardial effusion at the two-month follow up.

Conclusion: According to available data, there is a growing incidence of non-diphtheriae Corynebacterium endocarditis, particularly as a part of nosocomial infections or in immunocompromised patients. In most of the cases the affected valve was mitral or aortic, mostly affecting native valves. There is high incidence of multiple resistance to standard antibiotics in Corynebacterium causing endocarditis. We presented a case of native mitral valve infective endocarditis caused by Corynebacterium spp.

KEYWORDS: endocarditis, Corynebacterium, mitral valve.


*ADDRESS FOR CORRESPONDENCE: Krešimir Kordić, Klinički bolnički centar Sestre milosrdnice, Vinogradsk cesta 29, HR-10000 Zagreb, Croatia. / Phone: +385-98-1921-263 / E-mail: kordic.kresimir@yahoo.com

ORCID: Krešimir Kordić, https://orcid.org/0000-0002-9707-6946 • Nikola Kos, https://orcid.org/0000-0001-8829-2543 • Nikola Bulj, https://orcid.org/0000-0002-7859-3374 • Matias Trbušić, https://orcid.org/0000-0001-9428-454X • Ivo Darko Gabrić, https://orcid.org/0000-0003-4719-4634 • Ozren Vinter, https://orcid.org/0000-0002-4236-7594 • Igor Rudež, https://orcid.org/0000-0002-7735-6721 • Diana Delić-Brkljačić, https://orcid.org/0000-0002-7116-2360

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