To the Editor:

I read with interest the report published in the Canadian Journal of Infectious Diseases & Medical Microbiology by Zhou et al (1) describing a case of native valve endocarditis caused by Aerococcus viridans. Aerococci are rare causes of infective endocarditis (2) and reports such as the article by Zhou et al add important knowledge to the field. Species determination of aerococci is problematic and commercially available systems, such as Vitek 2 or API-strep, will erroneously identify Aerococcus sanguinicola as A viridans (3,4). A sanguinicola is probably a much more common cause of human infections than A viridans (4-6). In the report by Zhou et al, there is no information on how species determination was performed, and there is a possibility that the causative organism in the case described was not A viridans but instead A sanguinicola. Zhou et al also reviewed reported cases of endocarditis claimed to be caused by A viridans. Among the 10 cases summarized, only in one of the reports was species determination performed in a manner that confirmed that the causative organism was A viridans (7). Species determination of aerococci should be based on genetic methods or on matrix-assisted laser desorption ionization time-of-flight mass spectrometry (3,8), and most of the reports describing infections with A viridans likely represent infections caused by A sanguinicola.

Zhou et al (1) conclude that “A viridans endocarditis appears to be particularly virulent”. To elucidate the true prognosis for endocarditis caused A viridans and other aerococci, proper species determination is required, as is a systematic identification of cases reported in larger series.

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REFERENCES