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Commentary: An antibiotic in time...saves life!

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Dr Lee and colleagues¹ report a rare case of infective endocarditis in a 15-year-old patient with hypertrophic cardiomyopathy and severe left ventricular outflow tract obstruction. The patient underwent timely surgical intervention to remove the vegetation and reduce the obstruction across the left ventricular outflow tract. The authors are to be commended for their prompt lifesaving intervention.

In this case report, the authors call attention to the fact that pediatric patients with hypertrophic cardiomyopathy face a risk of endocarditis much like their adult counterparts. Although this is useful information, the case report brings to the fore a much larger issue facing the medical community: a major lacuna in our understanding of infective endocarditis in patients with heart disease. In 2007, based on the paucity of evidence of benefit, the American Heart Association guidelines on antimicrobial prophylaxis for prevention of infective endocarditis shifted to recommending prophylaxis for a much smaller subset of high-risk cardiac patients that did not include hypertrophic cardiomyopathy.²

Subsequent to this change in policy, there have been a multitude of reports of infective endocarditis following dental intervention in patients with hypertrophic cardiomyopathy, with some even suggesting an increase.³ Infective endocarditis is a deadly complication with fatal consequences, and the surgical interventions entail significant risks. This case report raises the question of the utility of a blanket policy on antibiotic prophylaxis based on type of heart disease.² Perhaps a more scientifically sound policy that takes into account other factors, such as severity of heart disease, vulnerability



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CENTRAL MESSAGE

Guidelines on antibiotic prophylaxis for invasive procedures in patients with hypertrophic cardiomyopathy need revision in the face of recurrent reports of endocarditis following these interventions.

to infection, and size of the expected bacterial inoculum, among other things, is the need of the hour.⁴ As a scientific community, we need to be honest with ourselves and when there is doubt to err on the side of patient safety. The AHA committee's statement to defend the altered policy that only a small number of endocarditis might be prevented by antibiotic prophylaxis is poor justification, given that these infections are often lethal and involve high-risk surgical operations for treatment. Referring a patient with hypertrophic cardiomyopathy to an invasive procedure such as dental work without antibiotic prophylaxis is begging for big trouble, as this case illustrates.

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