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Letter by Daniels et al Regarding Article, "Incidence, Causes, and Survival Trends From Cardiovascular-Related Sudden Cardiac Arrest in Children and Young Adults 0 to 35 Years of Age"

Lori B. Daniels, John B. Gordon and Jane C. Burns

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Correspondence

Letter by Daniels et al Regarding Article, “Incidence, Causes, and Survival Trends From Cardiovascular-Related Sudden Cardiac Arrest in Children and Young Adults 0 to 35 Years of Age”

To the Editor:

We read with interest the article by Meyer et al¹ describing the incidence, causes, and survival trends from cardiovascular-related sudden cardiac arrest among children and young adults younger than 35 years of age. We were surprised to note that over this 30-year period, no cardiac arrests attributed to missed Kawasaki disease were identified. Kawasaki disease, the most common cause of acquired heart disease in US children, is an acute febrile illness that can be difficult to diagnose. Coronary artery aneurysms form in 25% of untreated and 5% of treated children. Sudden cardiac arrest can be the presenting symptom of missed Kawasaki disease, attributable to acute thrombosis in coronary aneurysms or to sudden ventricular arrhythmia.² We have previously shown that ≈5% of young adults undergoing coronary angiography for suspected cardiac ischemia have coronary artery aneurysms consistent with a history of Kawasaki disease.³ It is therefore surprising to us that no cases of Kawasaki disease were identified over a 30-year period. We wonder whether some of the 47 cases that Meyer et al¹ classified as “cardiac unspecified” or as “other” (including the 1 case described as “coronary arteritis”) could be attributable to the cardiovascular sequelae of Kawasaki disease. Additionally, we wonder whether some of the cases categorized as “coronary artery disease” could have been misclassified. Although the pathology of coronary lesions in patients with a history of Kawasaki disease is very different from the pathology of typical coronary atherosclerosis, the 2 may be difficult to distinguish retrospectively via chart review.

As more children with a history of Kawasaki disease reach young adulthood, we believe that the incidence of sudden cardiac arrest

caused by the cardiovascular sequelae of Kawasaki disease is likely to increase. We suspect that the true incidence of sudden cardiac arrest caused by sequelae of Kawasaki disease remains underdiagnosed.

Disclosures

None.

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