Comment on "Left main aneurysm and what's next?"

DOI: 10.5114/pwki.2014.45167

We would like to thank the authors of the recently published paper exemplifying a case of coronary artery aneurism [1] for two reasons – firstly, for bringing up a rare and thus unappreciated problem and secondly, for elucidating treatment options and difficult decision making in an acute setting. As paediatricians we have a strong impression that Kawasaki disease (KD) is still an underestimated cause of coronary artery disease, leading to myocardial ischemia (MI), ventricular arrhythmia, and sudden cardiac death (SCD) not only in children but at any age. It is estimated that the annual incidence is ~10 cases per 100,000 white children < 5 years old and 10 times that in the Japanese. In untreated cases it leads to development of coronary artery aneurisms in up to 15–20% and 1.25% of overall mortality. Timely treatment limits both morbidity and mortality 10-fold but the risk cannot be fully eliminated at any time despite apparent recovery from the disease. It was proved that small aneurisms undergo pseudonormalisation of the arterial lumen, yet giant aneurisms persist for lifetime. Tsuda *et al*. documented a series of 12 patients with a history positive for KD aged 13 months to 27 years who died suddenly 2 months to 24 years after the onset of the disease [2]. Unfortunately, the KD etiologic factor is unknown and the first comprehensive diagnostic and treatment guidelines were published only a decade ago [3]. Moreover, it was only recently accepted that KD can present in atypical form lacking symptoms yet being equally devastating for the arteries [4]. This leads to many delayed or missed diagnoses and an increased risk of unfavourable outcome.

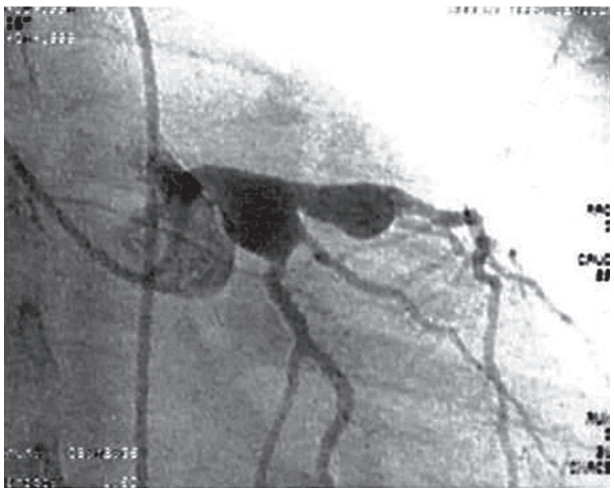

Figure 1. Angiogram of asymptomatic 5-year-old girl post Kawasaki disease showing saccular giant aneurism extending from LMCA to its both branches

In the presented case of a 64-year-old man, despite a characteristic saccular shape of the aneurism, childhood medical history is unavailable and other causes cannot be easily ruled out. On the other hand, among young adults and children with MI and aneurism, KD is first to blame [5] and a detailed medical history towards KD symptoms should be taken preferably from the parents (Figure 1).

References

1. Sciborski K, Kaaz K, Drozdz D, et al. Left main aneurysm and what's next? Postep Kardiol Inter 2014; 10: 57-9.
2. Tsuda E, Arakaki Y, Shimizu T, et al. Changes in causes of sudden deaths by decade in patients with coronary arterial lesions due to Kawasaki disease. Cardiol Young 2005; 15: 481-8.
3. Newburger JW, Takahashi M, Gerber MA, et al. Diagnosis, treatment, and long-term management of Kawasaki disease: a statement for health professionals from the committee on rheumatic fever, endocarditis, and Kawasaki disease, council on cardiovascular disease in the young, American Heart Association. Pediatrics 2004; 114: 1708-33.
4. Manlhiot C, Christie E, McCrindle BW, et al. Complete and incomplete Kawasaki disease: two sides of the same coin. Eur J Pediatr 2012; 171: 657-62.
5. Kwiatkowska J, Sabiniewicz R. The young man with a stenocardial acute chest pain. Cardiol Young 2011; 21: 223-4.

Jarosław Meyer-Szary MD
Robert Sabiniewicz MD, PhD
Department of Pediatric Cardiology and Congenital Heart Disease
Medical University of Gdansk
3a M. Skłodowskiej-Curie St, 81-210 Gdansk, Poland
Phone: +48 501 768 159
Fax: +48 501 768 159
E-mail: jmeyerszary@gumed.edu.pl

DOI: 10.5114/pwki.2014.45168

Author's reply

Thank you for your interest of our article. Your comment reveals the range of Kawasaki disease (KD) – a possible cause of aneurysms of the coronary arteries, the first manifestation of which may be sudden cardiac death. In the case of our patient, we cannot unequivocally state or exclude the cause of changes in the coronary arteries; whether KD in childhood or atherosclerosis or KD in his youth with progressive atherosclerosis in adulthood is responsible. A definitive diagnosis can rarely be made in adulthood.

Atypical symptoms and treatment of KD is a huge challenge for paediatricians and paediatric cardiologists; cardiologists and cardiac surgeons deal with complications of the disease in adulthood. What is positive, outcomes of causal and symptomatic treatment are getting better.

Krzysztof Sciborski MD
Konrad Kaaz MD
Department of Cardiology
Medical University of Wroclaw
213 Borowska St, 50-566 Wrocław, Poland
Phone: +48 58 349 28 82
E-mail: konrad.kaaz@gmail.com