

Images in Medicine

Multiple openings in right sinus of Valsalva

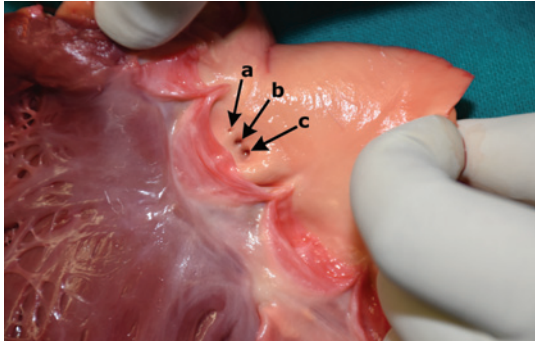


FIG 1. Image showing the origin of 3 coronary ostia from the right sinus of Valsalva. (a) The smallest opening was the infundibular branch of the right coronary artery. (b) The middle opening was supplying the anterior aspect of the right ventricle area adjacent to the right pad of fat area. (c) The largest opening was the main right coronary artery

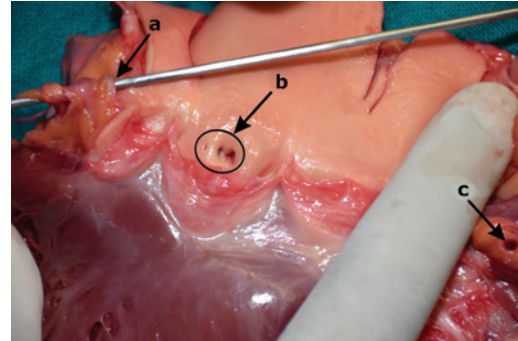


FIG 2. (a) Continuation of the left coronary artery; (b) multiple ostia originating from the right sinus of Valsalva; (c) ostium for the left coronary artery

A seemingly well 32-year-old man was found unconscious in a bathroom at home. He was taken to the emergency department of a hospital where he was declared brought dead. During medicolegal autopsy to ascertain the cause of sudden death, we observed that there were no signs of external injuries over the body. Internal examination of the heart revealed the 3 ostia for coronary arteries from the right sinus of Valsalva (Fig. 1). On further dissection, the smallest opening was for the infundibular branch of the right coronary artery. The middle opening was supplying the anterior aspect of the right ventricle area adjacent to the right pad of fat area. The largest opening was the main right coronary artery which supplied the sinoatrial node and was traversing through the atrioventricular sulcus coursing towards the posterior aspect of the heart to give the atrioventricular nodal and posterior interventricular branch (Fig. 2). The coronary arteries were patent throughout their course and there was no sign of myocardial pathology including ischaemia on gross and histological examination of the heart.

Prevalence of coronary artery anomalies ranges from 0.3% to 1%.¹ Coronary artery anomalies such as myocardial bridging, the high origin of coronary, multiple ostia or coronary artery fistula are conventionally diagnosed at autopsy. Most of the anomalies are asymptomatic; however, some anomalies can result in the sudden death of a person, especially in a young adult. In our patient, the cause of sudden death was not attributed to the heart but to a ruptured berry aneurysm located at the junction of the anterior cerebral and anterior communicating arteries.

Conflicts of interest. None declared

REFERENCE

- 1 Fujimoto S, Kondo T, Orihara T, Sugiyama J, Kondo M, Kodama T, *et al.* Prevalence of anomalous origin of coronary artery detected by multi-detector computed tomography at one center. *J Cardiol* 2011;57:69–76.

NAVNEET ATERIYA, ASHISH SARAF, PUNEET SETIA
 Department of Forensic Medicine and Toxicology
 All India Institute of Medical Sciences, Jodhpur, Rajasthan
 dr.navneet06@gmail.com