Abstract

Anomalous origin of the coronary arteries is an uncommon congenital heart disease, yet it is important as a potentially preventable cause of sudden death. Treatment of this condition, in particular surgery (or other revascularization procedures), is controversial; however, the development of non-invasive diagnostic techniques allows to make the proper diagnosis more frequently. For this reason, the number of patients diagnosed with this defect in increasing. Objective To analyze a population of patients with anomalous origin of the coronary arteries through the evaluation of diagnostic methods and surgical treatment. Material and Methods Patients undergoing surgery between 2004 and 2010 were retrospectively evaluated. We analyzed the clinical features, symptoms, complementary tests, indication of surgery and techniques used. Results A total of 23 patients (17 men and 6 women) between 18 and 32 years were evaluated due to exertional symptoms: angina (n=12; 52.2%); chest pain (n=4; 17.4%); syncope (n=4; 17.4%), and dyspnea (n=3; 13%). All electrocardiograms were normal, while exercise stress test had positive results in 10 cases. All patients underwent echocardiographic evaluation; the anomalous origin was detected in 16 patients (69.5%) and the proximal course was identified in 12 (52.2%). The diagnosis was made or confirmed by computed tomography angiography in the 23 patients; the method identified an interarterial course arising from the contralateral sinus. Surgical techniques were reimplantation of the coronary artery in 7 cases, coronary artery bypass grafting in 3 and unroofing the coronary sinus in 13 cases. No deaths were reported. Conclusions The defect is more common in the origin of left coronary artery. The diagnostic value of electrocardiogram was low. The diagnosis was made by computed tomography angiography which identified the proximal course. Unroofing was the surgical technique most commonly used.

Keywords

Cardiovascular Anomalies - Tomography - Cardiac Surgery.