

IMAGE ARTICLE

An Image Report; Posterior Lateral Artery Forming a Heart Image Representing the Love on the Heart

Yasemin Behram Kandemir¹, Unal Guntekin², Veysel Tosun³, Necmettin Korucuk⁴

¹Near East University, Faculty of Dentistry, Department of Anatomy, Nicosia, Cyprus.

¹Akdeniz University, School of Medicine Department of Anatomy, Antalya, Turkey.

²Akdeniz University, School of Medicine Department of Cardiology, Antalya, Turkey.

³Sanliurfa Training and Research Hospital, Department of Cardiology, Sanliurfa, Turkey.

⁴Ercis State Hospital, Department of Cardiology, Van, Turkey.

Abstract

It is important to know the variations of the coronary vessels for accurate diagnosis of coronary artery disease. The rate of occurrence of the variations of the coronary vessels detected during coronary angiography is 1-2%. In this study, we presented a case of a well-developed posterior lateral artery feeding a sinoatrial node from the right coronary artery and forming a heart image on the heart.

Key words: Posterior lateral artery, heart, variation

Introduction

Early diagnosis and treatment of chronic heart disease with a vital prescription is especially important for people with cardiac risk factors. As a result of cardiological examinations, coronary angiography (catheter angiography or coronary CT) is inevitable for the diagnosis of coronary artery disease (echocardiography, treadmill, etc.). In particular, angiographies can be used to demonstrate coronary artery disease, variations and anomalies [1]. For this reason, it is very important to know the anatomy of the coronary arteries and their variations in the diagnosis of coronary artery disease [2].

Image Report

A fifty-five year old male patient presented to our clinic with complaints of palpitation and shortness of breath. The patient's history was learned to be followed by acute rheumatic fever (mitral, aortic valve involvement) and atrial fibrillation for one year. The patient was using Digoxin 1 * 1/2, Bisoprolol 5 mg tb 2 * 1, Furasemide 1 * 1, Warfarin 5 mg Tb 1 * 1/2 for valve involvement and atrial fibrillation. On physical examination, arrhythmic, tachycardic and apexte 3/6 diastolic ball bearings were detected. Arterial blood pressure 100/60 mmHg; heart rate was 120 / min. There was no pathological finding in the laboratory examination. There was atrial fibrillation with high ventricular response in ECG. On transthoracic echocardiography; left atrial dilatation (5.8cm), left ventricular systolic function normal (EF: 60%), mitral valve peak 14 mmHg, mean 8 mm Hgg radiant, and mitral valve area planimetrically calculated as 1.5 cm². 3-4th degree aortic insufficiency, 1st degree tricuspid insufficiency was detected. Catheter and coronary angiography was performed

on this patient who underwent operation decision due to severe aortic insufficiency and moderate mitral stenosis. Coronary angiography showed that the posterolateral lateral artery from the right coronary was well developed, fed sinoatrial node, and had a heart image on the heart (Figure 1 and 2).

Discussion

The sinoatrial nodal artery, originating from a few millimeters

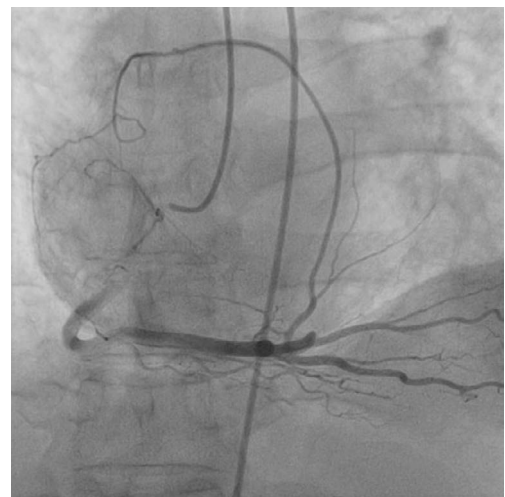


Figure 1: Heart image of the postero-lateral artery on the heart.

Correspondence to: Yasemin Behram Kandemir, Near East University, Faculty of Dentistry, Department of Anatomy, Nicosia, Cyprus. Akdeniz University, School of Medicine Department of Anatomy, Antalya, Turkey. Phone: +90 505 4676132, Fax.0392 2496952 E-mail: ybehramkandemir[AT]gmail[DOT]com.

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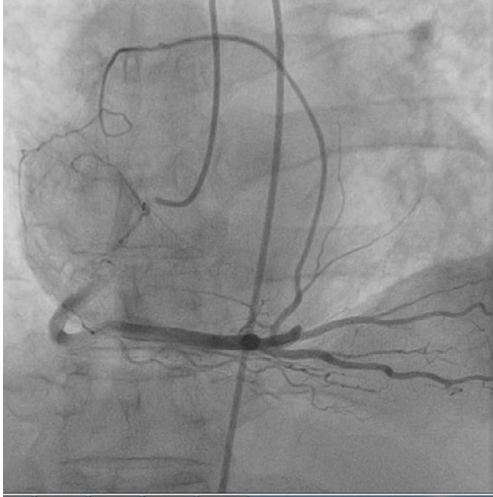


Figure 2: Heart image on the heart of the posterior-lateral artery from a different angle.

of the right coronary artery origin, is the second branch of the right coronary artery in almost 55% of cases and originates from the proximal left circumflex artery (LCx) in 41% to 45% bronchial artery [3]. The sinoatrial nodal artery, whatever its origin, is the course; always extending to the anterior part of the superior vena cava on the cephalic face of the interatrial septum, advancing into the anterior atrioventricular sulcus with the right coronary artery and continuing downward toward the posterior interventricular sulcus [4].

The right coronary artery, after giving its marginal branches, travels along the diaphragmatic surface of the heart through the anterior atrioventricular sulcus, separating the posterior dissecting artery (PDA) and the posterolateral lobe (PLD) at the level of the cricoid cordis. In these branches, the PDA feeds the interventricular septum, while the PLD feeds the posterior wall of the left ventricle. [5]. In our case, it was found that

the posterior lateral artery originating from the right coronary artery feeds the sinoatrial node. A well-developed posterior laryngeal artery showed a heart image on the heart.

Disclosures Informed Consent

Written informed consent was obtained from the patient who participated in this study. Peer-review: Externally peer-reviewed.

Conflict of Interest

None declared.

Authorship contributions

Concept Y.B.K, Design U.G, Supervision U.G, Materials U.G, Data collection &/or processing U.G, Analysis and/or interpretation U.G, Literature search Y.B.K, Writing Y.B.K, Critical review Y.B.K.

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