Images in cardio-thoracic surgery

Dual-source computed tomography for detection and postoperative imaging of the malignant right coronary artery anomaly

Cezary Kepka a,*, Maksymilian P. Opolski b, Mariusz Kruk a, Ilona Michalowska c

a Department of Coronary and Structural Heart Diseases, Institute of Cardiology, Warsaw, Poland
b Department of Interventional Cardiology and Angiology, Institute of Cardiology, Warsaw, Poland
c Department of Radiology, Institute of Cardiology, Warsaw, Poland

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A 40-year-old male presented with recurrent loss of consciousness on exertion. Dual-source computed tomography demonstrated a malignant course of the right coronary artery (RCA), arising from the left aortic sinus (Fig. 1, Videos 1 and 2). He underwent a successful bypass grafting to the mid-portion of the RCA (Fig. 2).

Fig. 1. 3D volume-rendered image demonstrated a malignant course of the RCA between the aorta and the pulmonary trunk. Note a significant compression of the proximal RCA consistent with ostial stenosis. Ao: aorta, Cx: circumflex artery, LAD: left anterior descending artery, PA: pulmonary artery, RCA: right coronary artery.

Fig. 2. 3D volume-rendered computed tomography performed 16 months after surgical revascularization confirmed good patency of the right internal mammary graft to the RCA. Ao: aorta, Cx: circumflex artery, LAD: left anterior descending artery, PA: pulmonary artery, RCA: right coronary artery, RIMA, right internal mammary artery.

Appendix A. Supplementary data

Supplementary data associated with this article (video 1 and video 2) can be found, in the online version, at doi:10.1016/j.ejcts.2010.09.034.