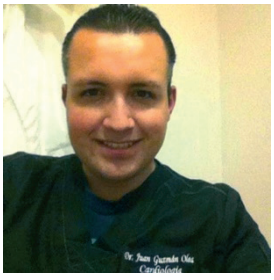
IMAGE IN INTERVENTIONAL CARDIOLOGY

Heart, Vessels and Transplantation 2020; 4: 161-163.
Doi: 10.24969/hvt.2020.222

Giant aneurysm of the left main coronary artery in a young man



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A 25-year-old male, without cardiovascular risk factors or cardiovascular history, was referred to our hospital for recurrent angina. Thirty days before he presented the signs of a clinical myocardial infarction without receiving medical assistance. An electrocardiogram showed a QS deflections and subepicardial ischemia in leads V1-V4 and qR deflection with subepicardial ischemia in leads DI-AVL (Fig. 1). Coronary angiography was performed that revealed a giant aneurysm of the left main coronary artery (Fig. 2A, arrow, Video 1), left anterior descending coronary artery with proximal lesion of 85% involving the origin of the 1st. diagonal branch Medina 0-1-1 (Fig. 2B, arrow, Video 2), codominant and ectatic circumflex and normal right coronary artery (Fig. 2C). Based on the findings and considering the age of the patient, we decided that myocardial viability should be evaluated and the patient should undergo surgical treatment.

The incidence of true coronary artery aneurysms is <1%. The right coronary artery is usually the most affected artery (40%) followed by the left anterior descending (32%), and the left main being the least affected artery (3.5%) (1). The presence of coronary aneurysm has been associated with poor long-term outcomes irrespective of the presence of concomitant atherosclerotic coronary artery disease. Clinical presentations range from incidental finding on cardiac imaging to acute coronary syndrome like this case (2, 3). Treatment options include medical therapy, surgical excision of aneurysm, coronary bypass surgery and percutaneous coronary interventions. However, the management of these patients poses a clinical dilemma to the physicians, due to the lack of evidence from randomized controlled trials or societal guideline recommendations (2, 3).

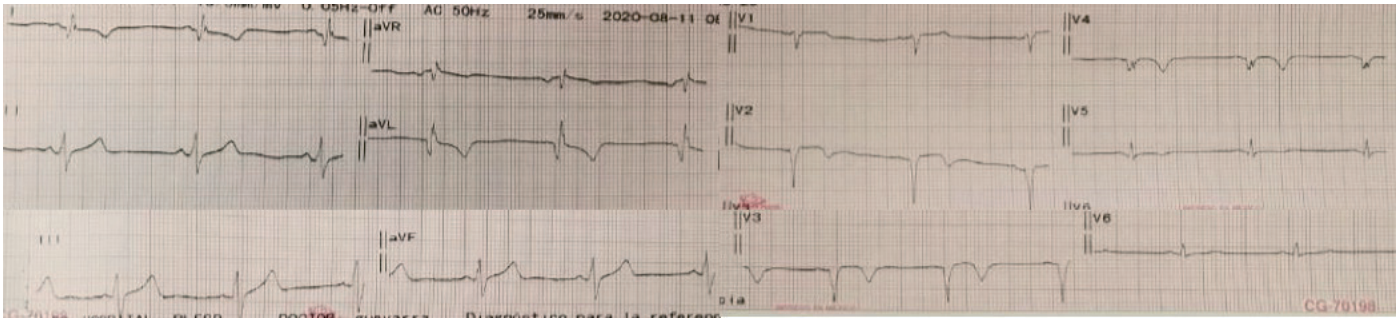

Figure 1. An electrocardiogram showing QS deflections and subepicardial ischemia in leads V1-V4 and qR deflection with subepicardial ischemia in leads DI-AVL

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Received: 23.11.2020 **Revised:** 03.12.2020 **Accepted:** 03.12.2020

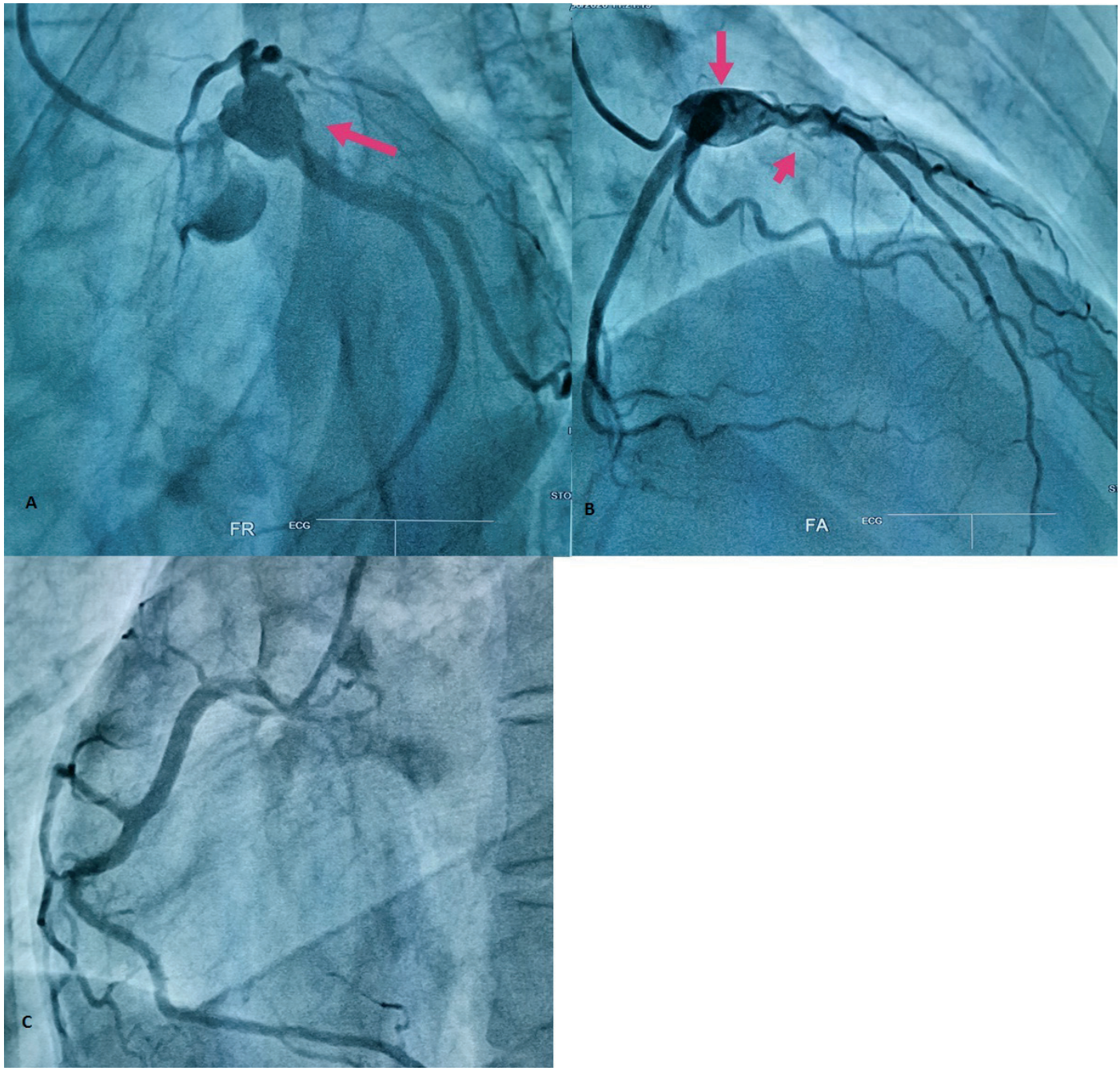

Figure 2. Coronary angiography views of a giant aneurysm of the left main coronary artery (A, arrow, Video 1- see videos at www.hvt-journal.com), left anterior descending coronary artery with proximal lesion of 85% involving the origin of the 1st. diagonal branch Medina 0-1-1 (B, arrow), codominant and ectatic circumflex and normal right coronary artery (C)

Video 1, 2. Coronary angiography views of a giant aneurysm of the left main coronary artery (visit www.hvt-journal.com to watch video)

Peer-review: Internal and External

Conflict of interest: None to declare

Authorship: J.G.O., G.G.O. are equally contributed to management of case and preparation of article

Acknowledgement and funding: None to declare

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