Images in cardio-thoracic surgery

Extensive dissection in left coronary artery

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A 32-year-old male with an acute coronary syndrome. Early coronary angiography showed an occlusion at the middle level of the left anterior interventricular artery. A primary percutaneous transluminal coronary angioplasty implanting a stent due to sub-optimal balloon results, obtaining a good angiographic result (TIMI III flow), and the patient was asymptomatic. Angiographic control was performed at 24 h showing extensive coronary dissection at the left main, left anterior descending, first diagonal, circumflex, first and second obtuse marginal arteries (Fig. 1). The probable mechanism was progressive spontaneous retrograde dissection from a segment of the stent. Four urgent coronary artery bypass grafts were performed. The postoperative course was uneventful, and the patient was discharged on the 10th day. After 2 years of follow-up, the patient is asymptomatic.

Fig. 1. Patient’s heart is viewed in the left anterior oblique caudal (A) and left lateral (B) projection. Coronary angiography visualizes dissection (radiolucent linear, within the coronary lumen during contrast injection) at the left main, proximal and middle portions of the left anterior, descending interventricular artery, 1st diagonal, circumflex, 1st and 2nd obtuse marginal arteries. (*) Segment with stent.

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