CARDIOPATIA ISCHEMICA *483*
MINOCA (MYOCARDIAL INFARCTION WITH NORMAL CORONARY ARTERIES)
(CARDIOPATIA ISCHEMICA)
TROMBOSI E COAGULAZIONE ***(ATEROTROMBOSI)***
RISONANZA MAGNETICA CARDIOVASCOLARE (CMR) ***(IMAGING CARDIOVASCOLARE)***
CARDIOMIOPATIE ***(MALATTIE DEL MIOCARDIO E DEL PERICARDIO)***

MINOCA IN A YOUNG PATIENT WITH ELEVATED PLATELET COUNT

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Ischemic heart disease is rare in young women, especially in the absence of a positive family history and strong cardiovascular risk factors, such as insulin-dependent diabetes. However, the correct diagnosis of ischemic heart disease in young population is mandatory, and the specific aetiology should be identified to ensure a proper treatment.
We present the case of a 35-year-old caucasian woman who underwent ambulatory cardiological evaluation after episodes of chest pain and worsening dyspnea (NYHA class II). The patient was asymptomatic at rest, BP was normal, heart rate was 80/minute in sinus rhythm, with no clinical signs of acute heart failure. ECG showed sinus rhythm with Q wave (lead DIII) and negative T waves (inferior leads). At echocardiographic evaluation LV was severely dilated (EDVi 105 ml/mq, EDD 66 mm) with akinesia and scar in the infero-posterior wall determining moderate reduction in ejection fraction (LVEF 40%), associated with secondary moderate mitral regurgitation; the right ventricle, the other valves and the aortic root were normal.
The young lady was then admitted to Cardiology Unit for further investigations. She underwent cardiac MRI, which confirmed LV dilatation and dysfunction (EDV 198 ml/mq, LVEF 42%), associated with akinesia and infero-postero-lateral wall scar, with transmural myocardial fibrosis in the same segments, and subendocardial fibrosis on the basal segment of the anterior wall.
Analysis of blood samples revealed elevated hemoglobin levels (Hb 17,5 g/dL, n.v. 12-16 g/dl) and extremely elevated platelet count (PLT 945.000/mmc, n.v. 130.000-400.000/mmc). Cardiac troponin I (cTnI) was negative on serial determinations. All findings were suggestive for subacute infero-posterior myocardial infarction.
Coronary angiography was performed via radial access: the exam was negative for significant stenosis in any coronary segment, only mild stenosis of proximal dominant left circumflex (LCX) artery was identified; moreover, there were no angiographic signs of coronary dissection. Eventually, SCAD and aortic defects were ruled out by coronary CT scan, which was negative for both coronary and aortic dissection. New blood samples examinations confirmed high values of Hb and PLT.
Low levels of EPO (1,4 mU/mL) and JAK-2 mutation V617F positivity suggested the clinical diagnosis of *essential thrombocythemia*, later confirmed by bone marrow aspiration.
Hydroxyurea was prescribed, as well as haematologic follow up.

DISCUSSION
This is an interesting case of ischemic heart disease, confirmed by ECG, echocardiography, and cardiac MRI, in presence of non-obstructive coronary artery disease. The aetiology of this specific case of MINOCA is potentially to be sought in the haematologic disorder. It is possible to hypothesize that a platelet/RBC clot might have determined acute obstruction of the proximal dominant LCX artery, then followed by spontaneous recanalization. Only mild stenosis on the proximal vessel was identified, and stenting was considered not appropriate for this lesion.