

Spontaneous Coronary Artery Dissection in a Patient with Henoch - Schönlein Purpura

Zeki Şimşek MD¹, Göksel Açar MD¹, Elnur Alizade MD¹, Mustafa Akçakoyun MD¹, Özlem Esen MD², Ali Metin Esen MD¹

¹Kartal Koşuyolu Heart Education and Research Hospital, Istanbul, Turkey

²Memorial Hospital, Istanbul, Turkey

ABSTRACT

Henoch-Schönlein purpura is a small vessel vasculitis that affects mainly the skin, joints, gastrointestinal tract and kidneys. The cardiovascular system is also rarely affected. We describe a 47-year-old man with Henoch-Schönlein purpura who developed anteroseptal myocardial infarction. The coronary angiography revealed coronary dissection at the level of second diagonal branch of left anterior descending artery as the culprit lesion. The region of dissection and the proximal lesion was successfully treated by stenting. The myocardial infarction on the basis of spontaneous coronary dissection in the present case with established Henoch-Schönlein purpura, may be the first to be described.

Key Words: Henoch-Schönlein purpura, coronary dissection, coronary angiography, vasculitis

ÖZET

Türkçe Başlık Eksik ????????

Henoch-Schönlein purpurası küçük damar vaskülitisi olup başlıca deri, eklem, gastrointestinal sistem ve böbrekleri etkilemektedir. Kardiyovasküler sistem nadiren etkilenir. Henoch-Schönlein purpurası olan anteroseptal miyokard infarktüsü geçiren 47 yaşındaki erkek hastayı sunacağız. Koroner anjiyografi ile sol ön inen arterin ikinci diyagonal dalı seviyesindeki koroner diseksiyon sorumlu lezyon olarak gösterildi. Diseksiyon bölgesi ve proksimalindeki lezyon stentleme ile başarılı şekilde tedavi edildi. Henoch-Schönlein purpura tanılı olguda spontan koroner diseksiyonu zemininde gelişen miyokard infarktüsü belki de ilk kez tanımlanmaktadır.

Anahtar Kelimeler: Henoch-Schönlein purpura, koroner diseksiyon, koroner anjiyografi, vaskülit

INTRODUCTION

Henoch-Schönlein purpura (HSP) is an autoimmune, hypersensitivity vasculitis that have been only a few reports about cardiac involvement of Henoch-Schönlein purpura (1,2).

Spontaneous coronary artery dissection has been defined as intramural haematoma of the media of the coronary vessel wall creating a false lumen that flattens the true lumen, leading to blood flow obstruction and acute myocardial ischemia, in the absence of iatrogenic causes and trauma. Etiology of the most cases of spontaneous coronary artery

dissection is unknown, but dissections have been seen in association with connective tissue disorders (Ehlers-Dahnlos syndrome and alpha-1 antitypsin deficiency, Marfan's syndrome), arteriosclerotic cardiovascular disease, exercise, the use of oral contraceptives, Kawasaki disease, sytemic lupus erythematosus, peri or post partum state and cocaine use (3).

CASE REPORT

A 47-year-old man has a history of Henoch-Schönlein purpura presented to a primary care hospital with

Address for Reprints

Özlem Esen MD

Memorial Hospital, Okmeydanı Istanbul, Turkey

Telephone: +90 212 314 66 66 Fax: +90 212 314 66 13 e-mail: ozlem.esen@memorial.com.tr

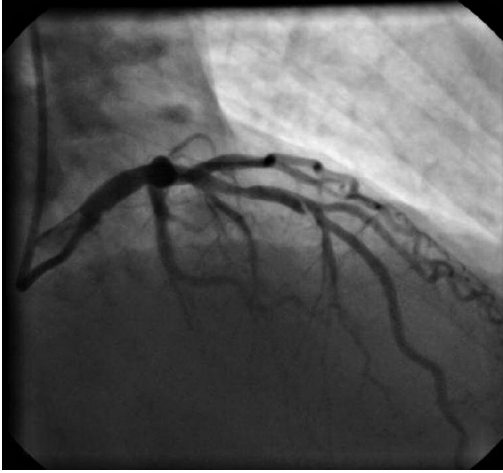


Figure 1: The coronary angiography demonstrated a localized 2 cm thin radiolucent line consistent with dissection at the level of second diagonal branch of left anterior descending artery (LAD) and a lesion just proximal to dissection .

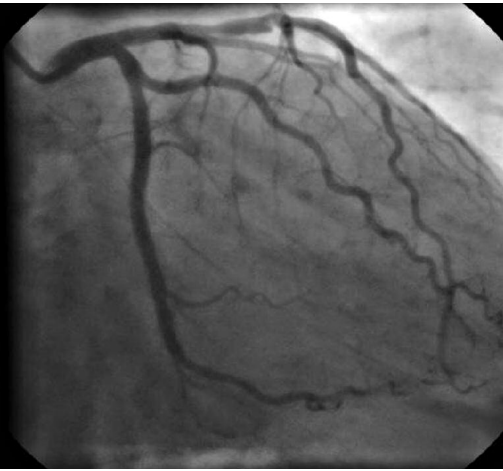


Figure 2: Left main coronary artery, and circumflex coronary artery were normal.

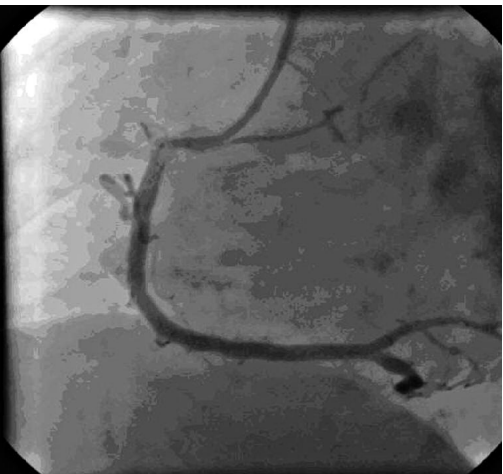


Figure 3: Right coronary artery was normal

anteroseptal myocardial infarction. He had been on immunosuppressive therapy (prednisolone 40 mg/d and azathioprine 100mg/d) for eight years. He had no history of diabetes mellitus, hypertension or ischemic heart disease. He has never smoked. The patient was admitted to a local hospital with two hours of typical chest pain. The patient was transferred to our cardiovascular center for catheterization. The 12-lead electrocardiogram demonstrated ST elevation (up to 6 mm) in leads V1-5.

He was taken to the cardiac catheterization laboratory with the clinical diagnosis of anteroseptal infarction where coronary angiography was performed. The coronary angiography demonstrated a localized 2 cm thin radiolucent line consistent with dissection at the level of second diagonal branch of left anterior descending artery (LAD) and a lesion just proximal to dissection (Figure 1). Left main coronary artery, and circumflex coronary artery were normal (Figure 2). Right coronary artery was normal (Figure 3) The region of dissection and the proximal lesion was successfully treated by stenting (3.0x32 mm paclitaxel covered stent). He was discharged after a week with the treatment of clopidogrel 75 mg/d, amlodipine 10 mg/d, metoprolol 100 mg/d, and aspirin 150 mg/d

DISCUSSION

The pathophysiology of spontaneous coronary artery dissection remain unclear and also the mechanism probably varies between the cases. Sudden death is much more frequent however survival is possible if obstruction is not complete or if a myocardial infarction develops without fatal complications. Spontaneous coronary artery dissection secondary to connective tissue disorders is more commonly seen in women (4).

The pathological finding first suggested by Robinowitz et al, was coronary eosinophilic arteritis resulting in a predisposition to intimal disruption and dissection (5,6). It was proposed that the dissection was a result of lytic action of protease released from eosinophils. This was later confirmed by many post-mortem studies, and was described as diffuse adventitial and periadventitial inflammatory reaction consisting mainly of eosinophils (7,8). After a thorough literature review, we can conclude that the acute myocardial infarction in the present case with established Henoch-Schönlein purpura, on the basis of spontaneous coronary dissection may be the first to be described. The rarity of Henoch-Schönlein purpura as a cause of acute myocardial infarction and spontaneous coronary dissection related with Henoch-Schönlein purpura makes this case interesting. Also as previously described in literature that male patients that present at later age with spontaneous coronary dissection, our patient was a male in late 40's with an atherosclerotic lesion in LAD. However the dissection was not associated

with the plague. Intracoronary stenting the treatment that would often be chosen if the dissection was iatrogenic, was successful in closing the inlet and the false lumen.

As a result, in the setting of myocardial infarction in a patient with connective tissue disease coronary artery dissection should be amongst the alternative diagnoses, and further confirmed by urgent coronary angiography.

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