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Case Report

Spontaneous Dissection of Coronary Artery "Lupudic Origin": A Rare Cause of Acute Coronary

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Abstract

Spontaneous coronary artery dissection is a rare cause of myocardial infarction and sudden cardiac death. Spontaneous coronary dissection SCAD, described for the first time in 1931, corresponds to the non-traumatic and non-iatrogenic appearance of an intraparietal hematoma, of which systemic inflammatory diseases are among the etiologies of the SCAD reporting to us.

Spontaneous coronary artery dissection (SCAD) is a poorly understood and under-diagnosed entity of acute coronary syndrome, however, in this case, we report our experience in the diagnosis and surgical treatment in an adult patient operated in our cardiovascular surgery department.

The case of an adult patient presenting an acute coronary syndrome discovered during his hospitalization for the management of his systemic lupus disease operated in our department

The 32 year old patient with a history of hypothyroidism, he was hospitalized in internal medicine for the management of systemic lupus "pulmonary, articular, cutaneous and serous involvement".

he presented an acute coronary syndrome, retrosternal pain, Coronary angiography: dissection of the left anterior descending artery LAD and first diagonal artery D1.

Patient operated in our department in whom we performed a double bypass on the left anterior descending artery LAD and first diagonal artery D1 good post-operative with good LV function at TTE out day 5 postoperative and control at 6 months after good function LV.

Spontaneous coronary dissection SCAD should be suspected before any acute coronary syndrome in an adult patient with little or without cardiovascular risk factors presenting with a systemic inflammatory disease and requiring regular follow-up, or conservative initial treatment should be preferred in the majority of cases.

Keywords: Spontaneous Dissection; Coronary Artery; Acute Coronary Syndrome

Introduction

Spontaneous coronary artery dissection is a rare cause of myocardial infarction and sudden cardiac death.

Spontaneous coronary dissection SCAD, described for the first time in 1931, corresponds to the non- traumatic and non-iatrogenic appearance of an intraparietal hematoma, of which systemic inflammatory diseases are among the etiologies of the SCAD reporting to us.

The case of an adult patient presenting an acute coronary syndrome discovered during his hospitalization for the management of his systemic lupus disease operated in our department.

Background and Aim

The most common mode of presentation is that of sudden onset myocardial ischemia in the absence of any previous history of heart disease.

Spontaneous coronary artery dissection (SCAD) is a poorly understood and under-diagnosed entity of acute coronary syndrome, affecting predominantly young women. Relatively large series have been published in the past five years highlighting this condition, once believed to be rare. Indeed, the pathophysiology, natural history, clinical presentation, patient profile, diagnostic modalities, management and outcomes of SCAD are becoming better understood.

However, in this case, we report our experience in the diagnosis and surgical treatment in an adult patient operated in our cardiovascular surgery department.

Case Report

The 32 year old patient with a history of hypothyroidism, he was hospitalized in internal medicine for the management of systemic lupus "pulmonary, articular, cutaneous and serous involvement" during his hospitalization, he presented an acute coronary syndrome retrosternal pain.

The electrocardiogram (ECG) revealed sinus rhythm: 72 bpm, negative T waves anterior extended TTE: septal hypokinesia, minimal pericardial effusion.

Scintigraphic aspect in favor of anteroseptal topography sequela of MI approximately 6 segments/17, with residual ischemia of 3 to 4 segments/17.

Coronary angiography: Dissection of the left anterior descending artery LAD and first diagonal artery D1.

Patient operated in our department in whom we performed a double bypass on the left anterior descending artery LAD and first diagonal artery D1.

Good post-operative with good LV function at TTE out day 5 postoperative control at 6 months after good function LV.

Figures

Discussion

Since its first description in 1931 more cases are now identified due to increased awareness and earlier use of angiography.

Despite that, the pathophysiology of SCAD remains poorly understood, the clinical features and prognosis are insufficiently characterized and the management of patients remains highly controversial.

SCAD is a rare cause of ischemic heart disease. In the majority of cases the diagnosis is made post- mortem, but sometimes the diagnosis may be established angiographically during or after an episode of acute coronary syndrome.

It is important to recognize SCAD, as patient characteristics and management differ from typical ACS.

After the initial management of the acute condition, subsequent treatment options are also controversial. There are several reports of CABG in patients with spontaneous coronary dissection, particularly in those with left main stem involvement or multivessel dissections.

It is important to note that literature suggests that CABG in SCAD patients may be hazardous because of the chance of dissection progression through the venous and arterial conduits or into the distal part of the grafted vessels.

Many reports recommend that this type of revascularization should be reserved for patients in whom aggressive medical treatment fails. another report a good prognosis following healing of dissections, so there is a scope for medical treatment [1-5].

Conclusion

Spontaneous coronary dissection SCAD should be suspected before any acute coronary syndrome in an adult patient with little or without cardiovascular risk factors presenting with a systemic inflammatory disease and requiring regular follow-up, or conservative initial treatment should be preferred in the majority of cases.

And once suspected, diagnostic coronary angiography is needed, then revascularization according to the extent of dissection.

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