Giant Ascending Aortic Aneurysm Mimicking Acute Coronary Syndrome

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ABSTRACT
A 70-year-old patient was admitted in our center for acute coronary syndrome but investigations revealed a giant ascending aortic aneurysm without dissection. The patient was successfully treated with a Bentall procedure, usually challenging in the case of giant aneurysm, because of the risk of preoperative injury.

Key words: Giant aortic aneurysm; Chest pain; Acute coronary syndrome; Bentall procedure

INTRODUCTION
Ascending aortic aneurysm are frequently asymptomatic and discovered on routine exams. Symptoms can occur in case of voluminous aneurysm linked with adjacent organs compression or with complications as dissection or rupture. We report here an unusual presentation of a non complicated voluminous ascending aortic aneurysm, considered initially as an acute coronary syndrome.

CASE REPORT
We describe a 70-year-old man with no past medical history who was admitted for acute chest pain. There was no significant family history. On physical examination, blood pressure was 110/60 mmHg, cardiac pulse was regular at 100/min. An aortic diastolic murmur was noticed.

The electrocardiogram was normal and troponin T was elevated to 100 ng/L (N<14 ng/L). He initially met the criteria for acute coronary syndrome. Chest X-ray showed a widened mediastinum (Figure 1A).

Bedside echocardiography was promptly performed and revealed a large ascending aortic aneurysm accompanied by severe aortic regurgitation in the tricuspid aortic valve and an important left ventricular enlargement (Figure 1B). The ejection fraction was preserved.

A computed tomography scan corroborated the diagnosis of an ascending aortic aneurysm and excluded any aortic dissection. The aortic aneurysm included aortic root, involved the ascending aorta with a maximum transverse aortic diameter of 84mm and extended up to the origin of the innominate artery (Figure 1C and D). A coronary CT scan did not reveal any significant lesions in the coronary arteries.

The patient underwent successful emergent surgical treatment with Bentall procedure (Figure 1E).

The postoperative course was uneventful and the patient was discharged home 9 days later after a reassuring CT scan control (Figure 1F).

DISCUSSION
Aortic aneurysm are rare before 50 years of age and the most common factor of thoracic aortic aneurysm is arteriosclerosis in the older population.1

The thoracic aortic aneurysm size increases at a rate of 0.1 cm/
CONCLUSION
Giant ascending aneurysm is a rare entity because the risk of complications is very important after a size of 6 cm. Moreover, the incidental discovery is frequent with the use of chest exams. Presentation as an acute coronary syndrome is rare and all patients with a non ST elevation acute coronary syndrome should be evaluated carefully in order to avoid complications in case of alternative diagnosis as acute aortic syndrome.

Surgical treatment is challenging and traditionally at high risk of mortality.

CONFLICT OF INTERESTS
There are no conflicts of interest with regard to the present study.

REFERENCES

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