

## A SILENT BUT FATAL CASE OF AORTIC DISSECTION

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### ÖZET

Aort diseksiyonu, kan basıncı ve aort duvarının yapısal anomalileri başta olmak üzere, çeşitli mekanizmaların katkısıyla, aort intimasında meydana gelen yırtık sonucu aortun tunika mediasının ayrılması ve kanın aort duvarının içine dolması olarak tanımlanır. Aort diseksiyonu, yaşamı tehdit eden, ani göğüs ve/veya sırt ağrısı ile karakterize bir hastalıktır. Aort diseksiyonu tipik olarak, "yırtılma" şeklinde tanımlanan göğüs, sırt veya karın ağrısının gibi ani gelişen semptomlarla biz hekimleri aort diseksiyonu yönünden uyarıcıdır. Vakaların aort diseksiyonunun ağrısız olabileceği ve nörolojik hadiseler ile başvurularıda olabilir. Acil servise aort diseksiyonunun tipik semptomları dışında senkop, bilinç değişikliği, ekstremitelerde güç kaybı gibi için beklenmedik belirtilerle başvuran hastalarda aort diseksiyonu tanısı akılda tutmamız gerekir.

**Anahtar kelimeler:** Aort diseksiyonu, nörolojik semptom, serebral enfarktüs, pleji

### ABSTRACT

*Aortic dissection is defined as the separation of the tunica media of the aorta and the filling of blood into the aortic wall as a result of a tear in the aortic intima, with the contribution of various mechanisms, primarily blood pressure and structural anomalies of the aortic wall. Aortic dissection is a life-threatening disease characterized by sudden chest and/or back pain. Aortic dissection typically alerts us physicians to aortic dissection, with sudden onset symptoms such as chest, back, or abdominal pain defined as "tearing". Cases may have aortic dissection without pain and may present with neurological events. The diagnosis of aortic dissection should be kept in mind in patients who present to the emergency department with unexpected symptoms such as syncope, altered consciousness, and loss of strength in the extremities, apart from the typical symptoms of aortic dissection.*

**Keywords:** *Aortic dissection, neurological symptom, cerebral infarction, plegia*

## INTRODUCTION

Aortic dissection is defined as the separation of the tunica media of the aorta and the filling of blood into the aortic wall as a result of a tear in the aortic intima, with the contribution of various mechanisms, primarily blood pressure and structural anomalies of the aortic wall (1). The most commonly used classification is that of De Bakey et al. Dissections that start from the proximal aorta and involve the entire aorta are called Type I. Those involving isolated ascending aorta are classified as Type II and those involving isolated descending aorta are classified as Type III (2). According to the Stanford classification, regardless of distal spread, dissections involving the ascending and arch are called Type A, and those involving the descending aorta are called Type B (3).

## CASE REPORT

A 77-year-old female patient who applied to an external center with complaints of numbness and weakness in her right leg, which started approximately 6 hours ago, lasted for approximately one hour and then completely regressed, was referred to our emergency service for further examination. Has a known history of hypertension. The vital parameters of the patient who has no additional complaints; Fever: 36.5°C Arterial Blood Pressure: RIGHT: 140/70 mm/Hg LEFT: 130/70 mm/Hg Pulse: 82 beats/minute, O<sub>2</sub> Saturation: 98%. On physical examination, respiratory sounds are normal and there is no additional pathology. There is no defense - rebound in the abdomen. Right femoral pulse was felt weak in the peripheral pulses, but the left femoral pulse beat was normal. laboratory findings White blood cell: 11,45/mm<sup>3</sup> (85% neutrophil dominance) hemogram: 10.8 g/dl C-Reactive Protein: 177 mg/dL Platelet: 155/mm<sup>3</sup> INR: 1.12 Creatine: 1 mg/dl urea: 65 mg/dl d dimer: 8.7 µg/ml. Neuroimaging and thoracoabdominal CT angiography were requested due to the patient's complaints. No acute pathology was observed in cranial brain computed tomography. Cranial diffusion magnetic resonance imaging (MRI) revealed millimetric infarct findings in the right caudate nucleus head. CT angiography showed dissection findings extending to the iliac-common and iliac artery, including the ascending aorta, aortic arch, and descending aorta (Figure 1). The patient was referred to another center in consultation with the cardiovascular surgery department and neurology unit. The patient, who was operated on by cardiovascular surgery, died in the follow-ups after the operation.

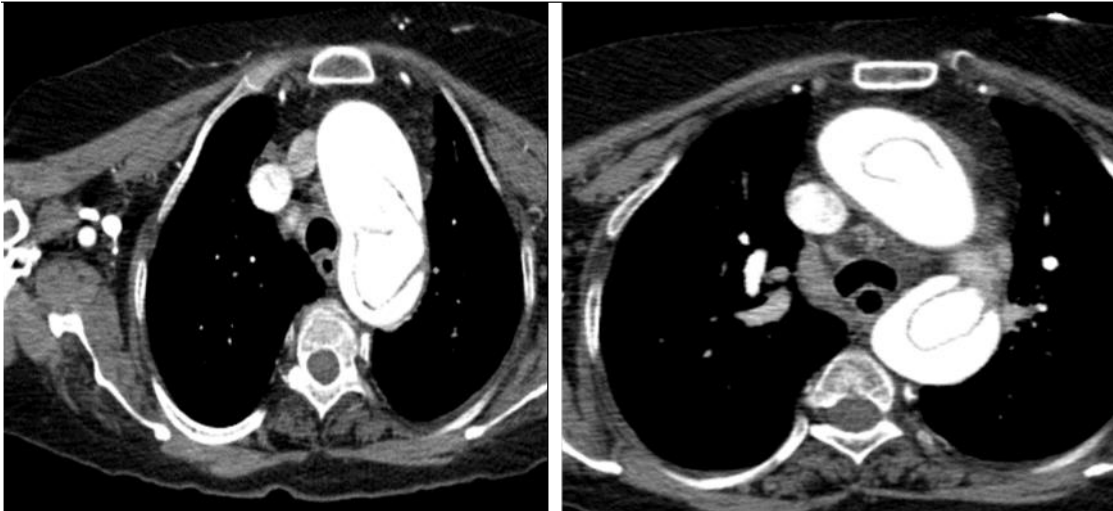


Figure 1. Computerized Tomography(CT) image of the patient

## DISCUSSION

Aortic dissection is a life-threatening disease characterized by sudden chest and/or back pain. Aortic dissection typically alerts us physicians to aortic dissection, with sudden onset symptoms such as chest, back, or abdominal pain defined as "tearing". These symptoms also provide patients with a quick and accurate diagnosis. Apart from this most characteristic symptom, the fact that these cases have different clinics may delay the diagnosis.

The disease is detected twice as frequently in men than in women (4). However, it should be kept in mind that aortic dissection may be painless in 10%-55% of cases (5-9). In the article they presented, painlessly similar to our case, these cases can often present with stroke, coma or spinal cord ischemia, acute renal failure, myocardial infarction, and co-workers' enteric ischemia findings (10,11). Patients may present with neurological symptoms such as hypoesthesia, plegia, syncope, horner's syndrome, and transischemic transient attack due to hematomas developing especially in dissection cases and decrease in organ nutrition in dissection cases(12,13). The most important factor in the diagnosis of acute aortic dissection is dissection (14). Therefore, in patients who present to the emergency department with unexpected symptoms for aortic dissection such as syncope, altered consciousness, hypotension, atypical abdominal pain, and loss of strength in the extremities, the diagnosis of aortic dissection should be kept in mind, and the physical examination should be evaluated in detail and necessary tests should be performed.

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