



Clinical Case Hidden in Young Patient is Ischemic Stroke

Genç Hastada Gizlenen Klinik Vaka İskemik İnme

Mustafa Alpaslan

Department of Emergency Medicine, Nevşehir State Hospital, Nevşehir, Türkiye

ABSTRACT

Stroke is a disease that can lead to severe sequelae and be fatal if not diagnosed early. While it is mainly seen in the older age group, it is rarely seen in the younger age group. A 23-year-old male patient presented to the emergency department with sudden onset of neurological symptoms. The fact that the patient was young and had promising clinical findings did not suggest the possibility of ischemic stroke in the first place. However, MRI imaging of the patient detected ischemic infarct areas in the brain. Various procedures were performed to investigate the etiological cause in the patient, but no pathological results were found. It was directed to the upper center for a more detailed examination. Early diagnosis of patients is crucial. An ischemic stroke should be considered in all patients with particular neurological symptoms, regardless of age.

Key words: ischemic stroke; young stroke; emergency medicine

ÖZET

İnme, erken teşhis konulamadığı durumda ciddi sekel bırakabilen ve ölümcül olabilen bir hastalıktır. En çok ileri yaşlarda görülürken nadir de olsa genç yaş grubunda da görülmektedir. Yirmi üç yaşında erkek hasta ani gelişen nörolojik semptomlarla acil servise başvurmuştur. Hastanın genç olması ve klinik bulgularının iyi olması iskemik inme olma ihtimalini düşündürmemiştir. Ancak hastanın ikinci başvurusu sonrasında detaylı inceleme yapıldığında beyin MR görüntülemesi yapılmış ve beyinde iskemik enfarkt alanları tespit edilmiştir. Hastada etiyolojik değerlendirme amacıyla detaylı olarak yapılan incelemelerde herhangi bir patolojik sonuç ortaya çıkmamıştır. Hasta daha detaylı inceleme amacıyla üst merkeze yönlendirilmiştir.

Nörolojik semptomu olan tüm hastalarda yaş farkı gözetmeksizin iskemik inme olabileceği mutlaka düşünülmelidir.

Anahtar kelimeler: iskemik inme; genç inme; acil servis

Introduction

Stroke is the second most common cause among diseases that cause sequelae and can be fatal worldwide¹. Although it is a known fact that ischemic stroke is more common with increasing age, it is seen at a high rate of 10–20% in the 18–50 age group. The primary disease can cause the longest sequelae throughout human life². With the increase in risk factors, ischemic infarction cases are now seen in the younger age group³. If the patient is 45 and under, it is considered a young stroke. The stroke frequency in this age group is around 2.5–40/100,000. When strokes are classified according to age group, 4%–10 of cases are encountered in young people⁴.

Case Report

A 23-year-old male patient was applied to the emergency department with a sudden onset of lightning like headache, blurred vision, and occasional dizziness. The patient's vital signs were stable and his blood pressure was 127/84 mm/Hg, heart rate was 86/min, oxygen saturation was 98%, and fever was 36.3°C. On physical examination, GCS was 15, cerebellar tests were normal, pupils were isochoric and eye movements were regular. He used to smoke less than one pack a day, and he had no known additional disease. Since there was no deficit in the neurological examination, it was thought that he might have a migraine with aura, and computerized tomography of the brain was taken to

İletişim/Contact: Mustafa Alpaslan, Nevşehir Public Hospital, Department of Emergency Medicine, Nevşehir, Türkiye • **Tel:** 0507 148 38 94 • **E-mail:** mustafalpaslan@gmail.com • **Geliş/Received:** 18.12.2022 • **Kabul/Accepted:** 14.07.2023

ORCID: Mustafa Alpaslan, 0000-0003-3170-0125

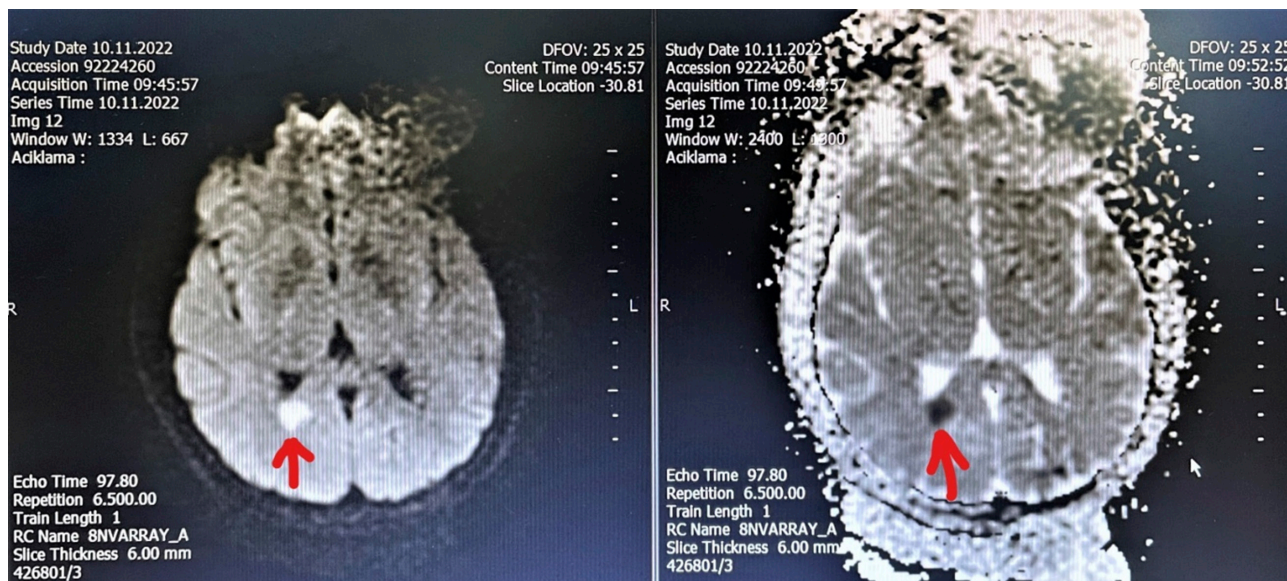


Figure 1. Acute diffusion restriction in magnetic resonance imaging-1.

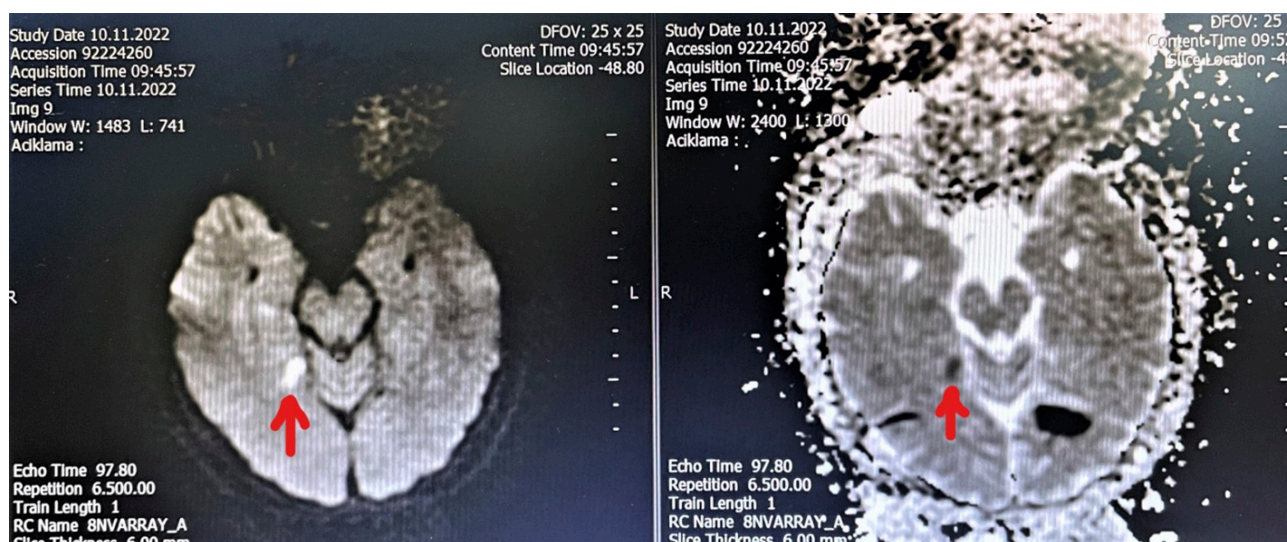


Figure 2. Acute diffusion restriction in magnetic resonance imaging-2.

rule out. Since no pathology was detected in the imaging, he was observed for symptomatic treatment.

When the patient's clinical findings did not improve, brain diffusion MR imaging was performed. An acute infarct area with diffusion restriction was detected in the right medial occipitotemporal gyrus area and right posterior periventricular white matter on MR images (Fig. 1 and Fig. 2). The patient was admitted to the neurology service. Routine laboratory tests and lipid profile, ECG, contrast-enhanced brain MRI and MR angiography imaging, bilateral carotid color Doppler ultrasound, echocardiography, 24-hour Holter

follow-up were performed in our patient in the studies performed in the neurology service, and no pathology was found. The infarct formed in the temporal region was ruled out regarding viral encephalitis. During the clinical follow-up, no fever was observed and the patient's symptoms decreased. During the service follow-up, low molecular weight heparin was administered subcutaneously at a dose of 0.4 mg 1*1. The patient was discharged with full recovery, but was referred to a tertiary healthcare institution for further investigation of developing ischemic stroke.

Discussion and Conclusion

Although there are many variable patient group applications in emergency services today, the number of admissions with neurological symptoms is substantial. The possibility of ischemic stroke is ignored, especially in the young age group, and there is a tendency towards symptomatic treatments. The younger age group is perplexed by the diagnosis of conversion. In the case of conversion, symptoms such as vision loss, double vision, headache, impaired consciousness, dizziness, movements resembling epileptic seizures, and motor and sensory loss such as paraesthesia may be observed⁵. Gilik et al. In the case they encountered in Ankara City Hospital, a 30 year old female patient was diagnosed with ischemic stroke⁶. Another confusing case may be migraine with aura. In addition to visual and sensory symptoms, severe recurrent headaches can be seen in migraine with aura⁷.

In this case, the findings were initially evaluated toward of migraine with aura. Studies have shown that ischemic stroke is more common in women under 30⁴. However, in this case, a 23 year old male patient was diagnosed with ischemic stroke. Similarly, Bahadırılı et al. detected an ischemic stroke in a 15-year-old male patient¹. In patients diagnosed with ischemic stroke at a young age, subsequent etiological investigations are significant. While atherosclerosis in large vessels and embolisms of cardiac origin are the most common, strokes of undetermined etiology are also considerably higher^{4,8}. The most common cause of stroke in young patients is a stroke of unknown etiology^{4,7-9}. In a study on the epidemiology and etiology of ischemic strokes in the young age group, smoking was found to be a risk factor with the highest rate¹⁰. In another study, smoking, hypertension, and dyslipidemia were the three most essential causes in young stroke patients¹¹. In this case, smoking may have been an essential reason for the patient's ischemic stroke.

In patients presenting to the emergency department, especially with neurological symptoms, organic causes should be ruled out first, and then psychiatric reasons should be addressed. Although it was thought it might be a migraine with aura, it was misleading. Regardless of age, it should always be considered that patients may have an ischemic stroke, and the diagnosis and treatment process should be planned accordingly. Considering most studies, smoking is seen as a significant risk factor. Therefore, the patient should be questioned in the anamnesis.

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