

## **SPEECH IMPAIRMENT AND UNDETECTED ISCHEMIA**

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### **ABSTRACT**

It was aimed to present a patient who applied to the emergency department with speech impairment and clouding of consciousness, and whose clinical findings improved within 3 days and no vascular occlusion could be detected, and to show that a clinic resembling a transient ischemic attack can only be based on clinical findings.

A 65-year-old female patient was brought to the emergency department due to gibberish, weakness, and confusion. The general condition was moderate, and the patient's glaskow coma scale was 12, with blurred consciousness. The patient was found to be disorientated. Brain computed tomography, diffusion MRI, and contrast-enhanced carotid vertebral artery brain CT angiography were found to be normal. The patient was admitted to the neurology service for follow-up with the suspicion of trans ischemic attack. 300 mg of acetylsalicylic acid 1x1 p.o. and intravenous saline was started. Neurological findings of the patient, who was followed up for 3 days, improved. It was detected as GCS:15. He was discharged with recommendations.

We think that our case report will contribute to the literature, since transient ischemic attacks usually return to normal findings within 24 hours of diagnosis and may be accompanied by findings such as plaque or vascular occlusion.

**Keywords:** Trans Ischemic Attack, Confusion, Cerebrovascular Disease.

## INTRODUCTION

Transient ischemic attack is focal cerebral function loss that usually affects a single vessel. Cerebral functions generally improve within 24 hours (1). The causes of stroke and transient ischemic attack are known as hypertension, hyperlipidemia, diabetes mellitus, smoking, and sedentary life (2). In our case report, it was aimed to present a patient who applied to the emergency department with speech impairment and clouding of consciousness, and whose clinical findings improved within 3 days and no vascular occlusion could be detected, and to show that a clinic resembling a transient ischemic attack can only be based on clinical findings.

## CASE REPORT

A 65-year-old female patient was brought to the emergency department due to gibberish, weakness, and confusion. The patient had no fever, seizure history, or history of Covid-19. PCR test was also negative. The blood sugar of the patient with a history of diabetes mellitus was 100 mg/dl. We were informed by the relatives of the patients that the blood sugar measured at home was within normal limits. The general condition was moderate, and the patient's glaskow coma scale was 12, with blurred consciousness. The patient was found to be disorientated. There were no conversion-like symptoms. Fever, respiratory rate, and pulse were normal. TA:170/90mmHg. In laboratory tests, WBC:7.41 K/ $\mu$ L, hemoglobin:11.5 g/dl, hematocrit: 36%, platelet:336 K/ $\mu$ L, INR:1.02, glucose: 100 mg/dl, urea:37 mg/dl, creatinine: 0.7 mg /dl, AST, ALT, sodium and potassium levels were within normal limits. Hemoglobin A1c levels were normal and hepatitis markers were negative. Brain computed tomography, diffusion MRI, and contrast-enhanced carotid vertebral artery brain CT angiography were found to be normal. Ejection fraction was 60% on echocardiography. The patient was admitted to the neurology service for follow-up with the suspicion of trans ischemic attack. 300 mg of acetylsalicylic acid 1x1 p.o. and intravenous saline was started. Neurological findings of the patient, who was followed up for 3 days, improved. It was detected as GCS:15. He was discharged with recommendations.

## DISCUSSION

Although no metabolic or ischemic pathology was detected, our patient developed temporary neurological examination findings. Although the clinical condition partially improved in the first 24 hours, completely normal clinical findings were reached on the 3rd day. Diagnosis of ischemic stroke and trans ischemic stroke should be made early as thrombolytic therapy should be done within 4.5 hours. In a study comparing the year in which tele-stroke systems were used and the year in which tele-stroke systems were not used, discharge from the hospital increased in the first 24 hours and mortality decreased in the tele-stroke group (3). Although no pathology was observed in brain CT and diffusion MRI in our patient, consultation with neurology was provided within 1 hour. While many studies have found that male gender is more risky in terms of both ischemic stroke and transient ischemic attack (4,5). This ratio is equalized in later ages. In a study by Soyudogru et al. in which they evaluated patients with ischemic stroke and transient ischemic attack, they found that most of their patients were between the ages of 65-75 and that the most common complaint was speech impairment. In the same study, the majority of patients with transient ischemic attack were men, and atrial fibrillation was detected at a rate of approximately 37% on electrocardiography (6).

In another study, atrial fibrillation rate was found to be high in patients with recurrent transient ischemic stroke or ischemic stroke, and no significant increase was observed in the rate of newly diagnosed atrial fibrillation (7). Our patient was a 65-year-old female patient, who came with the complaint of speech impairment and there was no atrial fibrillation in the EKG. Bulut et al. found that lacunar infarction was more common on CT in transient ischemic attack patients with irregular plaque detected by carotid artery Doppler ultrasonography (8). No pathological findings were observed in our patient's brain CT, diffusion MRI, and contrast-enhanced carotid vertebral artery brain CT angiography. We think that our case report will contribute to the literature, since transient ischemic attacks usually return to normal findings within 24 hours of diagnosis and may be accompanied by findings such as plaque or vascular occlusion.

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