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CASE REPORT **OLGU SUNUMU**

TOP OF THE BASILAR SYNDROME PRESENTING THROUGH BEHAVIORAL DISORDERS

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ABSTRACT

Top of the basilar syndrome (TOB-S) is defined as the infarction of the rostral brain stem thalamus, cerebellum, temporal and occipital regions of the brain that are supplied by the distal basilar artery. Different symptoms can be seen such as visual, oculomotor disturbances, altered consciousness, speech disorders, seizure, and hallucinations. In this article, we report that a 51-year-old female patient whose initial symptoms were social withdrawal, decreased of speech and inappropiate laugh affects and diagnosed with top of the basilar syndrome. This report emphasizes that the importance of neurological examination and neuroimaging in the management of cases presenting with sudden behavioral disorders at older age. We report a patient with TOB-S which a rare presentation. Clinicians must be alert to exist TOB-S which may occurs with different symptoms and signs like as changes in mood, personality and behavioral disorders.
Keywords: Top of the basilar syndrome, behavioral disorder, symptoms.

DAVRANIŞ BOZUKLUĞU İLE ORTAYA ÇIKAN BAZİLLER TEPE SENDROMU

ÖZ

Baziller tepe sendromu (BTS) distal baziler arter tarafından beslenen rostral beyin sapı, talamus, serebellum temporal ve oksipital bölgelerin enfarktüsü ve olarak tanımlanır. Görme, okülomotor bozukluklar, bilinç değişikliği, konuşma bozuklukları, nöbetler ve halüsinasyonlar gibi farklı belirtiler görülebilmektedir. Başlangıç semptomları toplumsal çekilme, konuşmada azalma ve uygunsuz gülme tepkileri olan 51 yaşındaki baziller tepe sendromlu kadın hasta bildirilmiştir. Bu yazıda ileri yaşlarda ani davranış bozuklukları ile başvuran olguların yönetiminde nörolojik muayene ve nörogörüntülemenin önemini vurgulamaktadır. Nadir başlangıç bulguları ile ortaya çıkan BTS tanılı hasta sunulmuştur. Klinisyenlerin duygudurum, kişilik değişiklikleri ve davranış bozuklukları gibi farklı semptomlar ve bulgularla ortaya çıkabilecek BTS açısından dikkatli olması gerekmektedir.
Anahtar Sözcükler: Baziller tepe sendromu, davranış bozukluğu, bulgular.

INTRODUCTION

Top of the basilar syndrome (TOB-S) is defined as the infarction of the rostral brain stem thalamus, cerebellum, temporal and occipital regions of the brain that are supplied by the distal basilar artery (1).

This syndrome presents with a variety of symptoms, including altered consciousness, oculomotor signs, memory, and speech disorders (2,3). Behavioral disorders also present as rare initial symptoms of TOB-S.

In this article, we report that a patient, whose initial symptoms were social withdrawal, decreased speech, and inappropriate laughing, was diagnosed with TOB-S.

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CASE REPORT

We describe a 51-year-old woman whose family noted that she exhibited social withdrawal, such as loss of interest in people and avoidance of eye contact. Also, her speech decreased, and she experienced vertigo that would last for days. She had hypertension, diabetes mellitus, and coronary artery disease. She stopped the use acetylsalicylic acid for a week. She had no spontaneous speech or movement and limited speech for questions in her neurological examination. The patient showed limited cooperation and laughed inappropriately. She had an ataxic gait and bilateral Babinski sign.

Routine laboratory tests were normal. Her electrocardiogram showed normal sinus rhythm. Cranial CT showed hypodensity in the pons and posterior horn of the right ventricular areas. Diffusion and apparent diffusion coefficient MRIs showed acute infarction in the bilateral cerebellum, pons, mesencephalon, left limbic area, and bilateral occipital lobes (Figure 1).

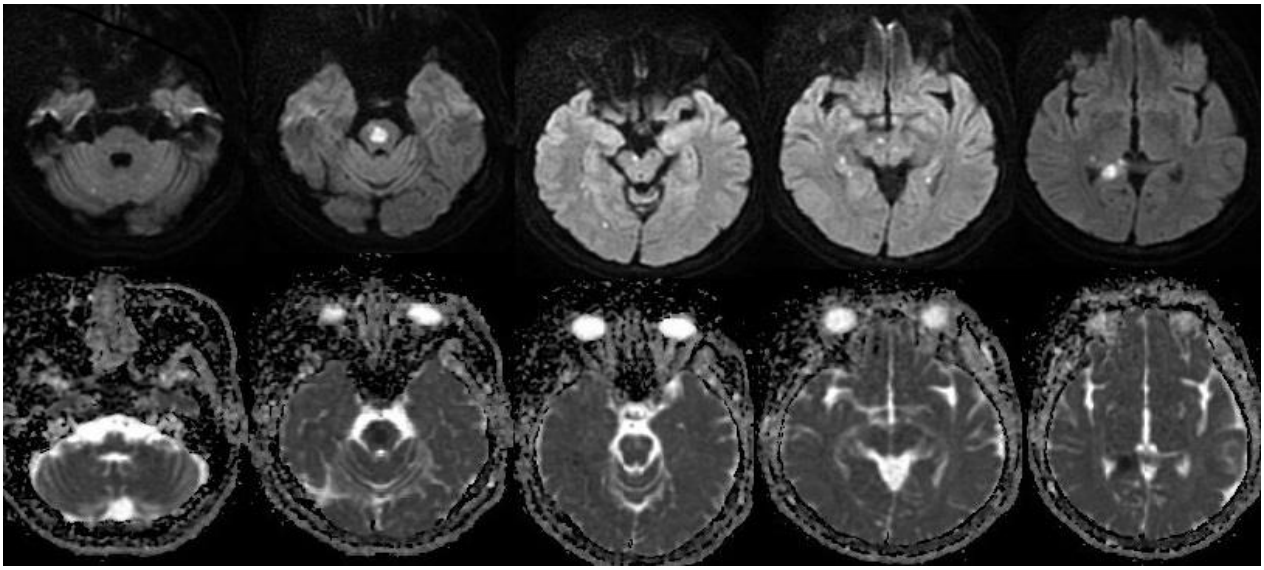

Figure 1. Diffusion and apparent diffusion coefficient MRIs showed acute infarction in the bilateral cerebellum, pons, mesencephalon, left limbic area, and bilateral occipital lobes.

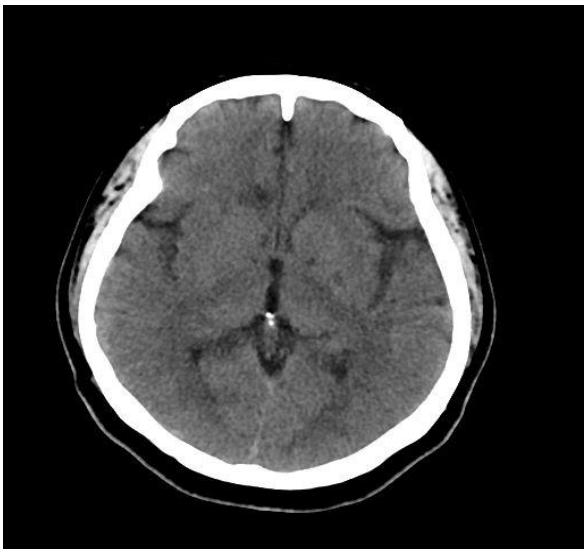

Figure 2. Left thalamic region infarction was also found when we performed a control CT.

She was hospitalized with TOB-S and treated with antiaggregant therapy. Left thalamic region infarction was also found when we performed a control CT (Figure 2). Carotid vertebral artery doppler ultrasound, echocardiography, and cranial CT angiography were normal.

Escitalopram therapy was started to treat inappropriate behavioral effects. Antiplatelet therapy was added for prevention of stroke. She received a post-stroke rehabilitation program to treat her ataxia. The patient was partially recovered from her social withdrawal and inappropriate laughing symptoms three months after the onset. Of note, informed consent was signed by the patient for this report.

DISCUSSION AND CONCLUSION

TOB-S is characterized by the disturbance of circulation in the rostral part of the basilar artery. Different symptoms can be seen, such as visual, oculomotor disturbances, altered consciousness, speech disorders, seizure, and hallucinations (2,4). Symptom severity may vary from mild to severe, and sometimes it can be mortal. Studies have reported that general symptoms of TOB-S include motor loss, altered consciousness, visual/oculomotor disturbances, cerebellar disorders, altered behavior, and speech disturbances (1,5). A recent study reported that motor deficit was the most commonly reported symptom, followed by altered consciousness, visual/oculomotor disturbance, cerebellar dysfunction, altered behavior, and speech disturbance, in descending order of frequency (6).

The patient described was diagnosed with TOB-S in the emergency room because she presented rare clinical symptoms and behavioral disorders which occurred suddenly. Social withdrawal, avoidance of eye contact, and decreased speech can be evaluated as psychiatric findings. The sudden onset of the symptoms suggested a neurological disease. Generally, frontal and prefrontal lobe lesions may be present with psychiatric symptoms and behavioral and personality disorders (7). Our patient had no frontal infarction.

The patient's age and history of hypertension, diabetes mellitus, and coronary artery disease, and her discontinued use of acetylsalicylic acid were important risk factors for stroke. The discovery of ataxic gait and bilateral Babinski sign on neurological examination were evidence that a cerebrovascular event may have been occurring. This report emphasizes the importance of neurological examination and neuroimaging in the management of cases presenting with sudden behavioral disorders at an older age.

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Ethics

Informed Consent: The authors declared that informed consent form was signed by the patient.

Copyright Transfer Form: Copyright Transfer Form was signed by the authors.

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