



# THE LUCK OF THE DRAW: MİGRAİNE AND FAHR DİSEASE NE ÇIKARSA BAHTINA: MİGREN VE FAHR HASTALIĞI

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#### ABSTRACT

Fahr's Disease characterized by symmetric calcifications at thalamus, nucleus dentatus, cerebral white substance and basal ganglia is a rare condition. Calcifications may be shown by computerized tomography provided for another reason. Migraine is an episodic primary headache disorder associated with neurological, gastrointestinal and autonomic symptoms. Unexpected or incidental some anomalies detection frequency is high with computed tomography (CT) and magnetic resonance imaging (MRI) in patients suffering from headache. In migraine patients that cranial imaging methods of pathology detection frequency ranged from 0% to 3% in various studies.

**Key Words:** Migraine, Fahr disease

#### ÖZET

Fahr Hastalığı talamus, nukleus dentatus, serebral beyaz madde ve bazal ganglionlarda simetrik kalsifikasyonlar ile karakterize nadir görülen bir durumdur. Kalsifikasyonlar başka bir neden için çekilen bilgisayarlı tomografide ortaya çıkabilir. Migren, nörolojik, gastrointestinal ve otonom semptomlar ile ilişkili bir epizodik primer baş ağrısı bozukluğudur. Baş ağrısı çeken hastalarda bilgisayarlı tomografi (BT) ve manyetik rezonans görüntüleme (MRG) ile beklenmedik ya da tesadüfi bazı anomalilerin saptanma sıklığı yüksektir. Migrenli hastalarda kranial görüntüleme yöntemleriyle patoloji saptanma sıklığı değişik çalışmalarda %0 ila %3 arasında değişmektedir.

**Anahtar Kelimeler:** Migren, Fahr hastalığı

#### Introduction

Intracerebral calcifications occurs with the storage of calcium or other minerals in basal ganglia, white matter and cerebellum. In 1930, an adult patients with progressive neurological symptoms and cerebral blood vessels in idiopathic calcification has been named Fahr's disease (FH) by Fahr (1). Migraine is an episodic primary headache disorder associated with neurological, gastrointestinal and autonomic symptoms. Migraine is most frequently encountered primary headache. While the prevalence of migraine was 4% before puberty, women in the mid-thirties up to 25% (2).

#### Case Report

A 30 years old female patient was admitted with complaints of headache started ten years ago that repeated 3-4 times a month, especially of the head more to the front localized, throbbing-astringent character, increasing with motion, light and sound against the discomfort. He said that a headache the increasing before and during the menstrual period and does not respond to painkillers. Normal neurological examination of patient was diagnosed migraine without aura. There was no in the family history of migraine. Pain in the past 6 months increased the patient's cranial CT were

detected both hyperdense basal ganglia calcifications partially symmetrical (Figure 1). The blood count was Hb:12.7 g/dL (12.1-17.2), white blood cells: 5000 K/uL (4-10), and the biochemical parameters were urea: 28 mg/dL (15-44), Ca: 8.8 mg/dl (N:8.5-10.4 mg/dl), P: 3.2 mg/dl (2,5-4,8 mg/dl), PTH:

66 pg/ml (N:12-72 pg/ml) and was diagnosed Fahr's disease. Coexist Migraine and Fahr's disease was considered to be incidental and patient was then discharged for follow-up as an outpatient.



**Figure 1:** Computed tomography section of the patient showing calcification in Basal ganglia region

## Discussion

Migraine is an episodic headache disorder characterized by various combinations of neurological, gastrointestinal and autonomic changes. The diagnosis of migraine headache is diagnosed retrospectively that largely the characteristics of headache and accompanying symptoms. Medical and neurological examination is usually normal. Laboratory studies and neuroimaging methods are usually normal and serve to exclude other, more ominous causes of headache. In patients suffering from headache is detection frequency high that computed tomography (CT) and magnetic resonance imaging (MRI) unexpected or incidental some anomalies. However, these abnormalities are often benign. Data from meta-analysis of 17 studies executed in 897 migraine patients have shown that only 0,4 % of patients had serious MRI abnormalities (3). Similarly, meta-analysis of 10 studies which had been executed in 1086 migrain patients have shown that only a minority of patients had suffered from serious abnormalities that might require any intervention to change the treatment (4). These ratios are not more than complete asymptomatic individuals with any MRI abnormalities (5). It has been reported that amongst the 78 patients either with migraine or tension headache 61,5 % had normal CT and 38,5 % had incidental abnormalities (6). Normal neurological examination in patient migraine that cranial imaging methods of pathology detection frequency ranged from 0% to 3% in various studies. In studies were identified pituitary adenomas, arachnoid cysts, empty sella, cortical atrophy, septum pellucidum, mega cisterna magna, periventricular hyperintensity areas (7-9). American Academy of Neurology had implied that routine imaging techniques are not necessary unless recurrent had changed patterns or the adult patient had seizures, focal neurologic signs or symptoms.

Fabrini et al. have reported that for atypic headaches which do not fulfill the criteria of IHS criteria, imaging technique would be necessary if the pattern of the headache change or is irresponsive to medical therapy, or in case any abnormalities imaging cranial or extracranial abnormalities had been shown in craniography or in EEG (10).

This case makes necessary again ask the question in migraine patient that how do we look to the surprise result.

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**Conflict of interest**

The authors declare no conflict of interest.