Letter to Editor

Carotid Artery Dissection Caused By An Amusement Activity Called Typhoon

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Abstract

Carotid artery dissection(CAD) and cardiac embolism are the frequent causes of stroke in young and middle aged adults. It has an incidence of 2.6-2.9/100.000 per year. The pathogenesis of dissections is unknown. CAD is thought to arise from an intimal tear that makes a penetration of circulating blood into the vessel wall, than this hematoma causes longitudinal and/or circular extension. It may develop spontaneously or after trauma. In %85 of cases,central neurological signs such as stroke,transient ischemic attack and amarozis fugax are seen,while headache and cranial nerve paralysis can be the presenting symptom in the rest of the cases. We reported a patient with CAD 30 minutes after a Typhoon(an amusement activity) ride.

Keywords: Carotid artery,carotid artery dissection,trauma

Dear Editor,

I read the recent publication on a case of “Isolated Hypoglossal Nerve Palsy Due To Internal Carotid Artery Dissection” with great interest(2). The patient had no history of trauma. By comparing this spontaneous carotid artery dissection(CAD) case with our case;we would like to highlight the importance of CAD.

A 39 years old female patient was brought to our emergency service with unconsciousness. She had no systemic or psychiatric disease history and no risk factors for atherosclerosis. After a Typhoon(an amusement activity) ride(Figure-1), the patient had head and neck pain. 30 minutes after the ride, clinical symptoms had occurred. She had right sided hemiparesis, global aphasia and right

Tayfun Adlı Eğlence Aktivitesinin Sebep Olduğu Karotis Arter Disseksiyonu

Özet

Genç ve orta yaşlı bireylerde inmenin en sık sebepleri karotis arter disseksiyonu(KAD) ve kalp embolileridir. Yıllık insidansı 2.6-2.9/100.000'dür. Disseksiyonun patogenezi bilinmemektedir. KAD'nun dolaşımdaki kanın damar duvarından intimal damla şeklinde penetrasyonu,sonra bu hematomun uzunlaması ve/veya dairesel yayılımı şeklinde başladığı düşünülmektedir.Sporant olarak veya trava ma sonrası ortaya çıkabilir. Hastaların %85'inde inme,geçici iskemik atak ve amarozis fugaks gözlenirken,geri kalan olgularda başaşı ve kraniyal sinir felçleri başlangıç bulgusu olarak gözlenebilir. Biz Tayfun(bir eğlence aktivitesi) deneyiminden 30 dakika sonra KAD gelişen olguyu sunduk.

Anahtar Kelimeler: Karotid arter,karotis arter diseksiyonu,trauma
sided central facial hemiparesis. In cranial computed tomography (CT) scan: left sided edema was detected.

Biochemical findings, blood count, markers for vasculitis and echocardiography were all in normal ranges. Cranial magnetic resonance angiography (MRA) demonstrated a 4-5 cm long left internal CAD starting 3 cm distally from the bifurcation (Figure-2).

Figure 1: Typhoon (an amusement activity)

Figure 2: MRA demonstrating left internal CAD
Carotid and vertebral artery dissections are responsible for up to %25 of strokes in patients younger than 45 years of age. Carotid artery dissection incidence is reported as 2.6-2.9 per 100,000(4).

MRA, digital subtraction angiography, multisection CT, CT angiography, extracranial and transcranial Duplex ultrasound can be used for investigations. On follow up, recanalisation can occur within the first 3 to 6 months, persistent occlusion or stenosis is reported in 15-40% of the patients(3).

The mortality rate is less than 5% by including asymptomatic and monosymptomatic cases. ¾ of the cases recover without significant disability(1).

CAD is an increasingly recognised cause of ischemic stroke among the young and middle-aged. Surgery and stent assisted reconstruction of carotid dissections in selected patients represent an emerging therapeutic alternative to standard medical therapy.

As a result clinicians have to keep in mind that sudden hyperextension and rotation of the neck is not only a risk factor of spinal cord injury but a risk factor of dissection as well.

**REFERENCES**