



Internal carotid artery dissection which mimicry trigeminal neuralgia and cluster headache

Trigeminal nevralli ve küme başağrısını taklit eden internal karotid arter diseksiyonu

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Summary

Cervical arterial dissection is an acute arterial disease. Although it's not common disease, 40–60% cerebral infarction and 20–30% transient ischemic attack could be seen so it is important to recognise. 53 years old female patient has consultation with head, neck and face pain which onset endaural after than spread directly left face half, effect of sometimes orbita and sometimes submaxilla area, occasionally accompanied by redness in the eye, extending from a few minutes to a few hours, it has been sharp and pulsatif characteristic and she never experienced before similar. Although not typical, with initial diagnosis, trigeminal neuralgia and cluster headache (CH), carbamazepine, tramadol treatment was started. The patient who had neck pain is severe during USG and with atypical features was BT angioed to the brain and neck in-terms of differential diagnosis of the patient. It was detected profile compatible with dissection at left ICA proximal. The most frequent clinical presentation of cervical ICA dissections is cervical pain and headache which can be seen in 67–77% of the cases before brain and retinal ischemic events. Dissection is an important cause of ischemic cerebrovascular(CVO) events observed in young to middle age. In conjunction with it's escape the attention cause in sight 2% incidence of ischemic stroke, some reports reported an etiologic cause of 14–20% below age 50. In the literature, there are rare cases of ICA dissection mimicking CH and other trigeminal autonomic cephalalgias. A common recommendation in CH case reports is the need for neurovascular imaging in cases with atypical features.

Keywords: Cluster; dissection; internal carotid artery; trigeminal neuralgia.

Özet

Servikal arteriel diseksiyon akut arteriel bir hastalıktır. Sık rastlanan bir hastalık olmamakla birlikte %40–60 oranında serebral infarkt, %20–30 oranında geçici iskemik atak görülebileceğinden tanınması önemlidir. 53 yaşında kadın hasta, 4 gündür olan, başlangıçta kulak içinden başlayıp yayılan, daha sonra direk sol yüz yarısında, bazen orbitaya bazen de alt çene bölgesine vuran, zaman zaman gözde kızarıklığın da eşlik edebildiği, birkaç dakikadan birkaç saate uzayan, keskin ve zonklayıcı vasıfta çok şiddetli, daha önce hiç yaşamadığı baş, yüz ve boyun ağrısı ile başvurdu. Tipik olmamakla birlikte trigeminal nevralli ve küme başağrısı ön tanılarını ile karbamazepin ve tramadol başlandı. Boyun ağrısı ultrasonografi (USG) sırasında şiddetli olan ve atipik özellikleri olan hastaya ayırıcı tanı açısından beyin ve boyun bilgisayarlı tomografi (BT) Angio çekildi. Sol internal karotid arter (ICA) proksimalinde diseksiyon ile uyumlu görünüm saptandı. Servikal ICA diseksiyonlarının en sık klinik prezentasyonu, beyin ve retinal iskemik olaylardan önce gelen, %67–77 oranında görülebilen servikal ağrı ve başağrısıdır. Diseksiyonlar, genç-orta yaşta görülen iskemik serebrovasküler (SVO) olayların, önemli bir nedenidir. İskemik SVO'nun sebepleri arasında %2 olarak görülmesi dikkatten kaçmakla birlikte bazı raporlarda elli yaşın altında etyolojik sebep olarak %14–20 oranında bildirilmiştir. Literatürde nadir olarak küme başağrısını ve diğer trigeminal otonomik sefaljileri taklit eden ICA diseksiyonu vakaları vardır. Küme başağrısı vaka bildirimlerindeki ortak öneri ise atipik özellikler olan durumlarda nörovasküler görüntülemenin gerekliliğidir.

Anahtar sözcükler: Küme; diseksiyon; internal karotid arter; trigeminal nevralli.

Introduction

Cervical arterial dissection, is an acute arterial disease characterized by internal carotid artery (ICA) or hematoma on the vertebral artery wall. The in-

cidence is 3/100000, despite the fact that it is not common disease, 40–60% cerebral infarction and 20–30% transient ischemic attack could be seen so it is important to recognise.^[1,2]

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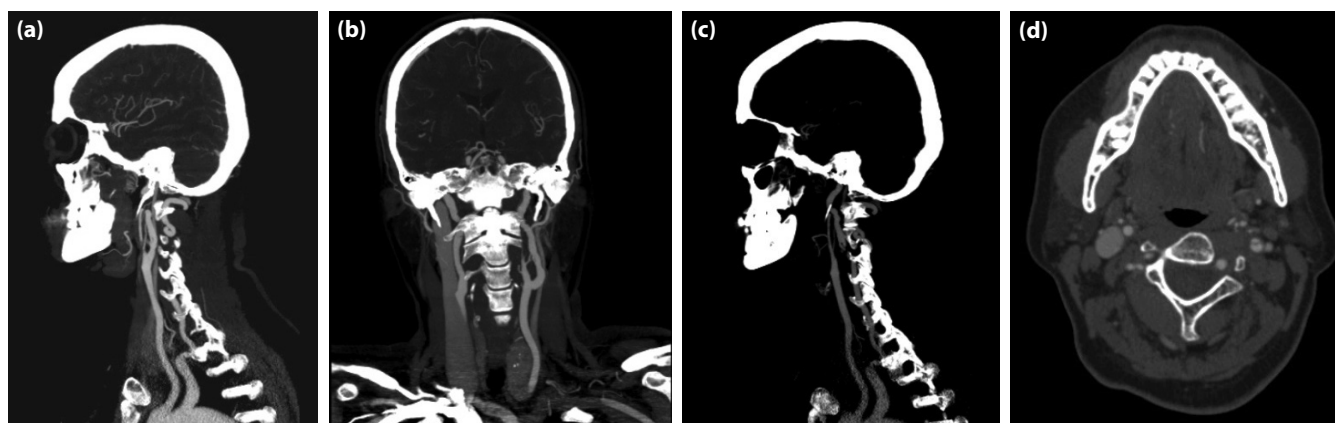


Figure 1. Internal carotid artery dissection.

Case Report

53 years old female patient has consultation with head, neck and face pain which onset endaural after than spread directly left face half, effect of sometimes orbita and sometimes submaxilla area, occasionally accompanied by redness in the eye, extending from a few minutes to a few hours, it has been sharp and pulsatif characteristic and she never experienced before similar. Her neurological examination was normal. Routine blood tests were within normal limits. Her history included diabetes mellitus, multinodular goiter, suspicion of trigeminal neuralgia on the right half of the face, and an old neck trauma story at 20 years ago. She was using metformin, levotiroksin sodyum, venlafaksin. She received partial benefit from 10 L/min oxygen therapy given to emergency department, followed by 100 mg meperidine i.v. administration that gave partially response. Brain CT and UST of carotid vertebral doppler were normalized. Although not typical, trigeminal neuralgia and cluster headache anomalies and pain were mostly short-lived and effect on jaw, so carbamazepine, tramadol treatment was started. She had a significant benefit from low-dose tramadol therapy. The patient who had neck pain is severe during USG and with atypical features was BT angioed to the brain and neck in terms of differential diagnosis of the patient. It was detected profile compatible with dissection at left ICA proximal and spasm-related irregularities at distal. Distal current was present (Figure 1a–d). The underlying disease was thought to be fibromuscular dysplasia (FMD) because of the fact that observation of tortiosis in bilateral cervical carotid arteries. Anticoagulant therapy was started to the patient. Control brain and neck CT angiography scanning the first month

was similar to the previous one. Treatment of the patient with 100 mg acetylsalicylic acid was continued.

Discussion

The most frequent clinical presentation of cervical ICA dissections is cervical pain and headache which can be seen in 67–77% of the cases before brain and retinal ischemic events. Dissection is an important cause of ischemic cerebrovascular (CVO) events observed in young to middle age. In conjunction with it's escape the attention cause in sight 2% incidence of ischemic stroke, some reports reported an etiologic cause of 14–20% below age 50.^[3–5] Presentation with only headache which is usually with the first and most frequent symptom is rare. Headache is seen mostly in extracranial dissections and it could have changeable features. Clinical findings could be change for depend on which localization of the dissection and which structures are adjacent. While frontotemporal, ipsilateral headaches are mostly associated with carotid dissections, neck and posterior headaches dependant vertebrobasilar system dissections. Neck pain is occur quadrant of ICA dissection. Thunderclap headache and subarachnoid hemorrhages also become differential diagnosis of dissections.^[3,6] Ashkenazi et al. reported a a case which was hemicrania continua phenotype and indomethacin that was beneficial.^[1–6] In the literature, there are rare cases of ICA dissection mimicking cluster headache and other trigeminal autonomic cephalalgias. It has been thought that dissection pain might cause of parasympathetic symptoms mimicking headache autonomic phenomena of cluster headache with result in physiologically trigemino-autonomic responses. A common recommendation in cluster headache case reports

is the need for neurovascular imaging in cases with atypical features.^[7-11] Dissection pathophysiology is not clear. It is believed that in most cases, except for trauma, there is genetic underlying wall weakness.^[1-3] Treatment is controversial, but it is about preventing the development of thromboemboli in the area of dissection. It has been determined that antiplatelet alone or in combination CADISS study compared with anticoagulation therapy did not dominate each other in protection. Several studies have reported that the stent implant has a low complication and is successful.^[3,12,13] In order to detect this situation which can have many complication, initially you have doubt. It should be kept in mind differential diagnosis in atypical features of head and neck pain.

Informed Consent: Written informed consent was obtained from the patient for the publication of the case report and the accompanying images.

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