

Facial Artery Aneurysm After Tonsillectomy, an Emergency Case

Tonsillektomi Sonrası Fasial Arter Anevrizması, Acil Bir Olgu

✉ Aylin Eryılmaz¹, ✉ Kutsi Köseoğlu², ✉ Yeşim Başal¹, ✉ Ceren Günel¹

¹Aydın Adnan Menderes University Faculty of Medicine, Department of Otorhinolaryngology, Aydın, Turkey

²Aydın Adnan Menderes University Faculty of Medicine, Department of Radiology, Aydın, Turkey



Abstract

In persistent bleedings after tonsillectomy despite all surgical procedures, facial artery aneurysm should be kept in mind. A case is presented with this rare situation. 12-year-old girl refers to her physician with bleeding four days after tonsillectomy in an outer center. Surgical control of bleeding from the left tonsillectomy area is done in this center. After one week the bleeding begins again from the same place. She is hospitalized in an other hospital for one week but no bleeding occurred in this time. A few days after discharge, she is referred to our hospital with an intense bleeding from oral cavity. Magnetic resonance angiography revealed left facial artery aneurysm. The facial artery aneurysm was filled with coil stents in the radiology department. After this procedure there was no bleeding in a one week hospitalization. Five days after discharge, the patient referred us with bleeding. This time facial artery blood flow was completely obliterated with coil stent. The patient had no bleeding in her two and six months control. In persistent bleedings after tonsillectomy aneurysms should be thought necessarily because they can be life-threatening.

Keywords

Child, facial artery aneurysm, tonsillectomy

Anahtar Kelimeler

Çocuk, fasiyal arter anevrizması, bademcik ameliyatı

Received/Geliş Tarihi : 08.10.2015

Accepted/Kabul Tarihi : 23.12.2015

doi:10.4274/meandros.galenos.2015.2507

Address for Correspondence/Yazışma Adresi:

Aylin Eryılmaz MD,
Adnan Menderes University Faculty of
Medicine, Department of Otorhinolaryngology,
Aydın, Turkey
E-mail : draylineryilmaz@gmail.com

ORCID ID: orcid.org/0000-0002-1417-7267

© Meandros Medical and Dental Journal, Published by Galenos Publishing House.
This is article distributed under the terms of the Creative Commons Attribution NonCommercial 4.0 International Licence (CC BY-NC 4.0).

Öz

Tonsillektomi sonrası kanamalarda tüm cerrahi müdahalelere rağmen kanama devam ediyorsa fasiyal arter anevrizması akla gelmelidir. Bu nadir durum ile ilgili bir olgu sunulmuştur. On iki yaşında kız hasta, dış merkezde yapılan tonsillektomiden dört gün sonra tonsil kanaması nedeniyle doktoruna başvurmuştur. Bu merkezde sol tonsillektomi alanına cerrahi kanama kontrolü yapılmıştır. Bu kanamadan bir hafta sonra aynı yerden tekrar kanama olması üzerine başka bir hastanede bir hafta hospitalize edilmiş ancak bu süreçte kanaması olmamıştır. Taburculuktan birkaç gün sonra, ağız içinden yoğun kanama ile tarafımıza refere edilmiştir. Manyetik rezonans görüntülemeye sol fasiyal arter anevrizması tespit edilmiştir. Radyoloji departmanında, fasiyal arter anevrizması bobin stenti ile doldurulmuştur. İşlem sonrası bir haftalık hastanede takipte kanama olmamıştır. Taburculuktan beş gün sonra hasta aynı bölgeden kanama ile başvurmuş ve radyoloji departmanında, fasiyal arter kan akımı bobin stenti ile tamamen oblitere edilmiştir. Hastanın ikinci ve altıncı ay kontrollerinde kanama görülmemiştir. Tonsillektomi sonrası persiste eden kanamalarda anevrizma, yaşamı tehdit edici olabileceği için önemle düşünülmelidir.

Introduction

Bleeding after tonsillectomy is one of the major complications after surgery. Among them the most serious ones are bleeding due to arterial dissection and pseudoaneurysm (1). Pseudoaneurysms after tonsillectomy has been reported in lingual, facial and internal carotid artery (2,3). If bleeding after tonsillectomy persists despite all surgical procedures facial artery aneurysm should be kept in mind. A case is presented with this rare situation.

Case Report

12-year-old girl refers to her physician with bleeding four days after tonsillectomy in an outer center. Surgical control of bleeding from the left tonsillectomy area is done in this center. After one week the bleeding begins again from the same place. She is hospitalized in another hospital for one week but no bleeding occurred in this time.

A few days after discharge, she is referred to our hospital with an intense bleeding from oral cavity and with hemoglobin decreased to 6 gr/dL. Tonsillectomy areas were observed completely clean without bleeding in her first examination.

Laboratory parameters associated with bleeding diathesis were normal.

Magnetic resonance angiography revealed left facial artery aneurysm. The facial artery aneurysm was filled with coil stents in the radiology department (Figure 1.). There was no leakage after the procedure. After this procedure there was no bleeding in a one-week hospitalization. Five days after discharge, the patient referred us with bleeding. Tonsillectomy areas were clean. This time facial artery blood flow was completely obliterated with coil stent (Figure 2, 3). Bleeding began during the procedure from her left tonsillectomy area and stopped after placing the coil stent. The patient had no bleeding in her two and six-months control.

Discussion

Extracranial carotid aneurysms in children are extremely rare. The etiology can be congenital, inflammatory or traumatic. Parapharyngeal and retropharyngeal space infections are also determined to be related to these aneurysms (4). In the literature an external carotid artery aneurysm was detected 10

days after tonsillectomy (5). The aneurysm was rescted surgically and ligation of the external carotid artery was done (5). Two cases with facial artery aneurysm after tonsillectomy are reported in a study (6). In these cases, as in our case coil has been applied into the aneurysm with endovascular angiography and surgery

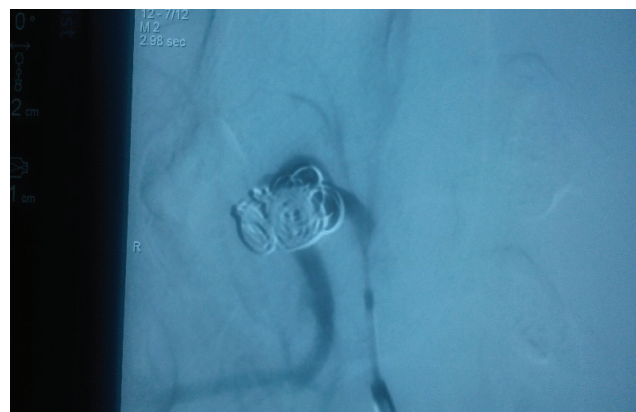


Figure 1. The facial artery aneurysm filled with coil stent



Figure 2. Facial artery blood flow completely obliterated with coil stent



Figure 3. Facial artery blood flow completely obliterated with coil stent-with a different view

is not required (6). Another case who is 19 years old with bleeding after 20 days from tonsillectomy is reported. Initially surgical bleeding control is done but the next day she has an intense bleeding. After that lingual facial tract aneurysm is detected and coil is placed angiographic in the aneurysm (7).

In bleeding after tonsillectomy, aneurysms should be thought necessarily because they can be life-threatening. Magnetic resonance angiography must be requested. In these cases, endovascular procedures are safe and effective.

Ethics

Informed Consent: Informed consent is taken.

Peer-review: Internally peer-reviewed.

Author Contributions

Surgical and Medical Application: A.E., K.K., Concept: A.E., Y.B., Design: A.E., Y.B., C.G., Data Collection or Processing: A.E., K.K., Y.B., C.G., Analysis or Interpretation: A.E., Y.B., C.G., Literature Search: A.E., Y.B., C.G., Writer: A.E.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

References

1. Atmaca S, Belet U, Baris S. Post-tonsillectomy pseudoaneurysm of the linguofacial trunk: An ENT surgeon's nightmare. *Int J Pediatr Otorhinolaryngol Extra* 2012; 7: 12-4.
2. Van Crujlsen N, Gravendeel J, Dijkers FG. Severe delayed posttonsillectomy haemorrhage due to a pseudoaneurysm of the lingual artery. *Eur Arch Otorhinolaryngol* 2008; 265: 115-7.
3. Karas DE, Sawin RS, Sie KC. Pseudoaneurysm of the external carotid artery after tonsillectomy. A rare complication. *Arch Otolaryngol Head Neck Surg* 1997 Mar; 123: 345-7.
4. Unal OF, Hepgül KT, Turantan MI, Bozboga M, Yazicioglu E. Extracranial carotid artery aneurysm in a child misdiagnosed as a parapharyngeal abscess: a case report. *J Otolaryngol* 1992; 21: 108-11.
5. Pourhassan S, Grotemeyer D, Fokou M, Heinen W, Balzer K, Ramp U, et al. Extracranial carotid arteries aneurysms in children: single-center experiences in 4 patients and review of the literature. *J Pediatr Surg* 2007; 42: 1961-8.
6. Weber R, Keerl R, Hendus J, Kahle G. The emergency: traumatic aneurysm in the area of the head-neck. *Laryngorhinootologie* 1993; 72: 86-90.
7. Manzato L, Trivelato FP, Alvarenga AY, Rezende MT, Ulhôa AC. Endovascular treatment of a linguofacial trunk pseudoaneurysm after tonsillectomy. *Braz J Otorhinolaryngol* 2013; 79: 524.