

TİP 1 TİMPANOPLASTİ SONRASI GECİKMİŞ FASİYAL PARALİZİ

DELAYED FACIAL PALSY FOLLOWING TYPE 1 TYMPANOPLASTY

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ÖZET

Sorunsuz geçen bir kulak ameliyatından günler veya haftalar sonra ortaya çıkan gecikmiş yüz felci nadir bir durumdur. Prognozu genellikle iyi olsa da, hem hasta hem de cerrah için korkutucu bir sonuçtur. Bu can sıkıcı komplikasyon çoğunlukla sadece timpano-mastoidektomi, stapes cerrahisi, koklear implant ve endolenfatik cerrahiden sonra bildirilmiştir. Literatürü incelediğimiz kadarıyla olgumuz, literatürde sunulan tip 1 timpanoplasti sonrası fasiyal felci geciken ilk olgudur. Bu olgu sunumunda, mevcut literatür ışığında tip 1 timpanoplastiyi takiben postoperatif 9. gün periferik fasiyal paralizi ile gelen bir vakayı ve tedavi yaklaşımımızı sunmayı amaçladık.

ANAHTAR KELİMELER: Timpanoplasti, Fasiyal sinir, Gecikmiş fasiyal paralizi

ABSTRACT

Delayed facial paralysis that occurs days or weeks after a trouble-free ear surgery is a rare condition. Although its prognosis is generally good, it is a frightening result for both the patient and the surgeon. This troubling complication has mostly been reported only after tympano-mastoidectomy, stapes surgery, cochlear implant, and endolymphatic surgery. As far as we have investigated in the literature, our case is the first case of delayed facial palsy after type 1 tympanoplasty presented in the literature. In this case report, we aimed to present a case with peripheral facial paralysis on the postoperative 9th day following tympanoplasty type 1 and our treatment approach in the light of the current literature.

KEYWORDS: Tympanoplasty, Facial nerve, Delayed facial palsy

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INTRODUCTION

Facial nerve palsy (FNP) is a displeasing and rare complication of otologic interventions. This annoying complication has been reported only after tympano-mastoidectomy, stapes surgery, cochlear implant, and endolymphatic surgery (1 - 3). As far as we searched the literature, our case is the first one having delayed facial palsy after type 1 tympanoplasty presented in the literature. In this case report, we present a case of delayed FNP after type 1 tympanoplasty and our approach for treatment.

CASE

Written informed consent was obtained from the individual participant included in the study. A 49 years old male patient admitted to our clinic with hearing loss in the left ear and occasional ear discharge lasting for about 4 years. Otoscopy revealed a central perforation of approximately 4x5 mm in size. Pure tone audiometry showed 35 decibel mixt type hearing loss on the left ear. The patient's temporal computed tomography showed no pathology of ear except perforation (**Figure 1**).

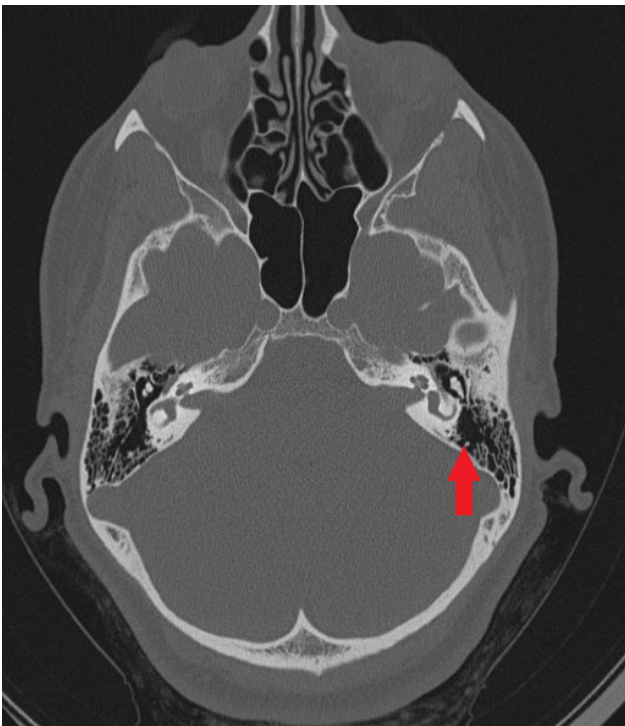


Figure 1: Axial CT image of ear. Arrow on the left indicating normal mastoid and tympanum

The patient underwent a type 1 tympanoplasty via underlay technique. Surgery was uneventful. After surgery the patient had no complaint.

patient admitted back with a grade-4 FNP after 9 days of surgery (**Figure 2**).



Figure 2: Image of patient with House-Brackmann grade 4 left facial palsy on postoperative 9th day

Herpes simplex virus-1 (HSV-1) genome was not detected with the PCR. The HSV1 IgM and the HSV1 IgG titer was negative also. There was no sign of infection in the left ear. Immediately after facial palsy diagnose, steroid therapy was given with administration of prednisone 120 mg/d followed by decreasing dosages in 3 days with 15 mg/d for 15 days. On the 6th day, A stir in the closing movements of the left eye was witnessed on the 6th day of treatment. Better improvement of the facial nerve (House grade II) was seen on the 11th day. On the 15th day, full recovery of facial nerve was obtained. The graft was intact and no recurrence was seen in the 6th-month control.

DISCUSSION

Facial palsy is an uncommon complication of otologic interventions. Etiology is generally traumatic and related to operative difficulties or anatomic abnormalities. FNP can occur immediately or with a delay subsequent to operation. Instantaneous palsy may be because of regional anesthetics and may revert in a few hours. Intraoperative critical operational trauma of the facial nerve can also cause total facial paralysis directly. Delayed FNP is reported with a range of 48 hours and 16 days postoperatively (1 - 5).

As far as we searched the literature just one case was presented as delayed facial palsy after tympanoplasty and mastoidectomy (6). Delayed FNP is usually from compression of nerve fibers by edema, harm to the blood supply to the facial nerve during operation, drilling-induced heat, or inflammation in the early postoperative phase (7 - 9). The added cause for delayed FNP can be viral reactivation. The vulnerability of facial nerve / chorda tympani, thermal or mechanical intervention nearby the facial nerve, or steroid/antibiotic soaked gel foam on geniculate ganglion can begin herpes virus reactivation. Varicella-zoster virus is also a presumable cause (10). Also, postoperative infection of the surgical area can cause delayed facial palsy. In our case, none of these causes were detected.

As a conclusion, although delayed facial palsy after an otological surgery generally has a good prognosis, the administration of steroids must be applied at once. Surgical decompression of the facial nerve is necessary infrequently in these types of cases.

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