



OLGU SUNUMU

F.Ü.Sağ.Bil.Tıp Derg.
2013; 27 (2): 99 - 100
http://www.fusabil.org

Serdar ALTUN¹
Aysun YILDIZ ALTUN²

¹Harpüt Devlet Hastanesi,
Plastik Cerrahi Kliniği,
Elazığ, TÜRKİYE

²Elazığ Eğitim ve Araştırma
Hastanesi,
Anesteziyoloji ve Reanimasyon
Kliniği,
Elazığ, TÜRKİYE

The Long Term (20 Years) Effects of Closed Nostrils to the Lung Parenchyma: A Case Report

The earliest known nose reconstruction was described in Samhita which is an old Indian publication, about 600 BC. Later an Italian surgeon called Gaspare Tagliacozzi described the delayed arm flap for nasal reconstruction in 1597. A 65 year old female patient admitted to our hospital with the complaint of obstructed nostrils. 20 years ago she has lost the nose (inferior portion) and got the defect reconstructed with Tagliacozzi flap. Her nostrils were patent at the time of surgery but soon they were obstructed. During the past 20 years both of the her nostrils were closed completely when the patient did admit to our department. During all those years the patient has breathed through her mouth. We have performed CT scan which demonstrated bilateral emphysema of the lungs. We have concluded that the emphysematous changes in the lung parenchyma are due to the chronic long lasting obstruction of the nostrils.

Key Words: Closed nostril, long term effect, pulmoner emphysema.

Uzun Süre (20 Yıl) Kapalı Kalan Nazal Pasajın Akciğer Parankimi Üzerine Etkileri: Olgu Sunumu

Burun rekonstrüksiyonu ilk defa milattan önce 600'lü yıllarda Samhita tarafından tanımlanmıştır. Samhita, burun rekonstrüksiyonu için günümüzde halen kullanılan alın flebini tarif etmiştir. Daha sonraları 1597 yılında İtalyan cerrah Gaspare Tegliacozzinin tanımladığı geciktirilmiş kol flebi ile burun rekonstrüksiyonu avrupada popüler hale gelmiştir. Hastanemize başvuran 65 yaşındaki kadın hastanın şikayeti burun deliklerinin olmaması ve nefes almada güçlük idi. 20 yıl önce burun ucunda gelişen defekt üzerine Tagliacozzi flebi ile burun rekonstrüksiyonu yapılarak ve burun delikleri de anatomik olarak oluşturulmuş ancak oluşturulan burun delikleri operasyondan yaklaşık 1 yıl sonra kendiliğinden kapanmış. Hasta bu süreden sonra sadece ağız solunumu yapmaya başlamış. Olgumuzun çekilen toraks tomografisinde akciğerinde iki taraflı amfizem saptandı. Alkol ve sigara kullanma öyküsü olmayan, geçirilmiş akciğer hastalığı ve enzim anomalisi olmayan hastanın amfizemi burun deliklerin kronik uzun süreli tıkanıklığına bağlandı.

Anahtar Kelimeler: Kapalı nazal pasaj, uzun dönem etki, akciğer amfizemi.

Introduction

The earliest known nose reconstruction was described in Samhita which is an old Indian publication, about 600 BC. Sushruta transferred the skin of the forehead to the nose for nasal reconstruction (1). Later an Italian surgeon called Gaspare Tagliacozzi described the delayed arm flap for nasal reconstruction in 1597 (2). Although these are termed to be historical techniques, staged tissue transfers for reconstruction of various defects of the body can be a valuable tool in rural areas where technical circumstances are poor to perform more complicated reconstructions.

Case Report

A 65 year old female patient admitted to our hospital with the complaint of obstructed nostrils. 20 years ago she has lost the inferior portion of her nose including the nasal tip the alae and columella due to a trauma. The defect was reconstructed by a Tagliacozzi flap transferred from the left upper arm in a rural hospital. Her nostrils were 3 patent at the time of surgery but soon they were obstructed due to flap retraction and lack of nostril retainers. During the past 20 years she had undergone a number of unsuccessful attempts to open the nostrils. Both of the nostrils were closed completely when the patient did admit to our department (Figure 1). During all those years the patient has breathed through her mouth. We have performed CT scan of the lungs before the operation in order to rule any chronic changes within the lung parenchyma. CT scan demonstrated bilateral emphysema of the lungs (Figure 2).

Geliş Tarihi : 10.04.2013
Kabul Tarihi : 28.06.2013

Yazışma Adresi Correspondence

Serdar ALTUN
Harpüt Devlet Hastanesi,
Plastik Cerrahi Kliniği,
Elazığ-TÜRKİYE

serdaralt@gmail.com



Figure 1. The patient with closed nostrils. The tissue from the forearm can easily be separated from the rest of the nose due to poor tissue match.

Discussion

Obstruction in the nasal passages has been shown to affect the mechanics of breathing (3). In a small series of patients with nasal obstruction, a decreased lung compliance and increased pulmonary resistance was found by mouth and nose respiration measurements (4).

Our patient has no known risk factors for emphysema in her past medical history. She neither has smoked nor used alcohol. There wasn't any history of a past disease that may attack the lung parenchyma or any enzymatic

References

1. Mathes SJ. Plastic Surgery, 2nd Edition, Philadelphia: Saunders Elsevier, 2006; 27-28.
2. Micali G. The Italian contribution to plastic surgery. Ann Plast Surg 1993; 31: 566-571.
3. Swift AC, Campbell IT, Mckown TM. Oronasal obstruction, lung volumes, and arterial oxygenation. The Lancet 1988; 331: 73-75.



Figure 2. CT scan of the patients showing the emphysematous changes of the bilateral lower lobes with dilated bronchi.

abnormality. So we have concluded that the emphysematous changes in the lung parenchyma are due to the chronic long lasting obstruction of the nostrils. The nostrils may be obstructed partially or completely because of a number of reasons. This short report points out the importance of patent upper airways, so the surgeons should pay special attention to the patency of the upper airway in any kind of operation they perform in the nose.

4. Ogura JH, Togawa K, Dammkoehler R, et al. Nasal obstruction and the mechanics of breathing: physiologic relationships and the effects of nasal surgery. Arch Otolaryngol 1966; 83: 135-150.