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CASE REPORT/ OLGU SUNUMU

Unilateral absence of the parotid gland: a rare disorder

Nadir bir olgu: tek taraflı parotis bezi yokluğu

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ABSTRACT

Unilateral agenesis of the parotid gland is an extremely rare disorder. Only a few cases have been reported in the literature. Although this entity is usually asymptomatic, sometimes it may be important. For an example the normal parotid gland can be thought like a tumor due to the facial asymmetry. Accompanied by clinical and radiological findings, we present a case of unilateral parotid gland agenesis without involvement of other major salivary glands and together with a compensatory hypertrophy of the contralateral parotid gland. *J Clin Exp Invest 2010; 2(1): 88-90*

Key words: Parotid gland, agenesis, computed tomography, magnetic resonance imaging.

ÖZET

Tek taraflı parotis bezi yokluğu oldukça nadir görülen bir durumdur. Literatürde çok az olgu bildirilmiştir. Bu durum sıklıkla asemptomatik olsa da bazen önemli olabilmektedir. Çünkü karşı taraftaki parotis bezinin normalden daha belirgin olması yüz asimetrisine neden olup, yanlışlıkla tümör ön tanısı düşündürebilir. Bu olgu sunumunda yüz asimetrisi şikayeti ile gelen, klinik ve radyolojik bulgular neticesinde, karşı tarafta parotis bezi hipertrofiye uğramış tek taraflı parotis bezi agenezisi olan ve diğer tükrük bezleri normal olan bir vakayı sunduk. *Klin Deney Ar Derg 2010; 2(1): 88-90*

Anahtar kelimeler: Parotis bezi, agenezi, bilgisayarlı tomografi, manyetik rezonans görüntüleme.

INTRODUCTION

Absence of the parotid gland is an extremely rare occasion with only few cases reported in the literature. Agenesis may be partial or total, unilateral or bilateral. Other salivary glands agenesis may associate with parotid agenesis.[1,2,3] The etiopathogenesis of this pathology is not understood entirely yet. It can appear singly or in conjunction with other genetic developmental disorders.[3,4] If it is symptomatic, it manifests as facial asymmetry, absent papillae, dry mouth or dental decay secondary to reduced salivary flow.[1,2,3] But unilateral parotid gland agenesis is often asymptomatic and detected incidentally. The diagnosis of this entity is important, because the normal parotid gland or accessory parotid tissue may be thought a tumor mistakenly due to the facial asymmetry.[1] We, here reported a case of unilateral total agenesis of the parotid gland without involvement of the other major salivary glands and associated with a compensatory hypertrophy of the contra lateral parotid gland.

CASE

A 42 years old male patient was admitted to our clinic with complaints on the facial asymmetry. Physical examination revealed that the right pa-

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rotid side was being more prominent without any pain or palpable masses. Intraoral examination revealed an adequate salivary flow through the papillae of the right Stenson's duct after stimulation. The papillae of the left side could not be found. On palpation, bilateral submandibular glands were normal. Outflow of saliva through both Wharton's papillae was normal. The oral mucosa seemed wet and the patient had no complaints associated with hyposalivation. But common dental problems were observed on both sides of the mouth. Radiologic evaluation (ultrasonography, computerized tomography and magnetic resonance imaging) was performed to demonstrate and confirm the lack of the left parotid gland and a homogeneous enlargement of the right parotid gland (Figure 1,2,3). The patient required no treatment.

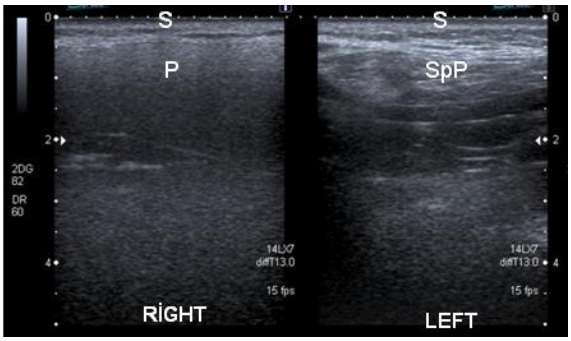

Figure 1. Ultrasound scan showing the absence of left parotid gland. SpP: space where parotid should be. S: skin surface. P: Parotid gland

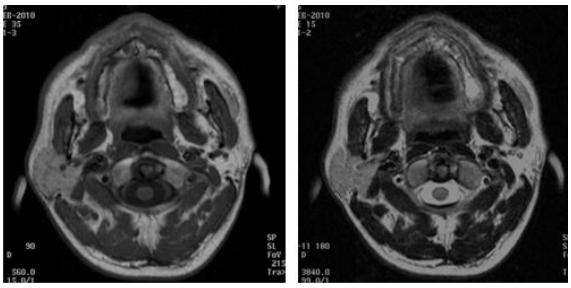

Figure 2. T1 and T2 weighted MR axial image demonstrating the complete absence of left parotid gland as compared to the right parotid gland.

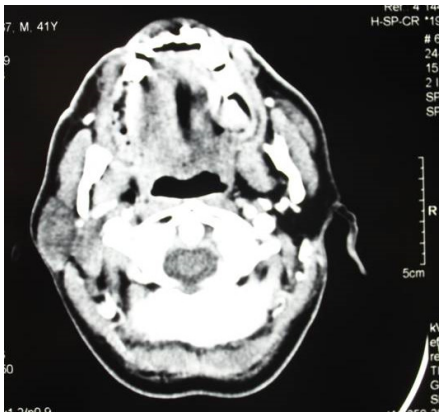

Figure 3. Axial CT section demonstrating the complete absence of left parotid gland as compared to the right parotid gland.

DISCUSSION

Unilateral absence of parotid gland has been reported less commonly than bilateral absences in the literature.[2] In majority of the unilateral cases, the absence of glands are not noticed by the patients and this may be the important reason of this low incidence. So detection of the true incidence of this entity is difficult to ascertain. Therefore, these cases are usually detected by chance. But sometimes the patients refer with complaints of facial asymmetry because of the compensatory hypertrophy of the normal parotid gland which can be seen more pronounced.[2] In such cases, the normal parotid gland can be thought a tumor mistakenly due to the facial asymmetry.[1] A careful physical examination should be done to prevent wrong diagnosis. The absence of the papillae of salivary duct is an important finding of the absence of parotid gland during the intraoral examination.[2]

The clinical presentation of salivary gland agenesis varies depending on the number of missing glands and their contribution to whole saliva.[4] Symptoms range from those that are negligible to profound and persistent dry mouth.[4] Severely affected patients suffer from a dry mouth, an increased rate of dental decay, oropharyngeal infection and difficulty in wearing dentures.[1,2,3] How-

ever, unilateral cases usually don't suffer from these symptoms, due to the sufficient production of saliva by the other salivary glands.

Imaging is necessary for the exact diagnosis of parotid agenesis. The parotid region is most often evaluated with ultrasonography, computerized tomography (CT), and magnetic resonance imaging (MRI).[1] Ultrasonography should be performed first, on both sides. CT and MRI are more sensitive and allow comparison of both sides.[2] The presence of residual or ectopic glandular tissue can be easily ruled out.[3] Clinical examination associated with these imaging studies allows specific diagnosis of agenesis of parotid gland.[3]

Unilateral parotid gland agenesis is a rare disorder. It may be completely asymptomatic. In this case, we want to emphasis that sometimes the normal parotid gland may be thought like a mass in unilateral parotid gland agenesis.

The diagnosis must be confirmed with imaging. If necessary treatment should be supportive, including use of saliva substitutes, attention to oral hygiene and dental care.[1,2,4]

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