

# Postauricular Pilonidal Sinus: A Rare Case Report and Brief Literature Review

## Postauriküler Pilonidal Sinüs: Nadir Bir Olgu Sunumu ve Kısa Literatür Derlemesi

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**Abstract:** A 28-year-old male patient applied to our clinic for the complaint of an enlarged mass with occasional discharge behind the left ear. Physical examination revealed a total of three fistula ostiums, the largest of which was large base, mobile, soft consistency, painless, and approximately 2x1 cm in size in the left postauricular region. Histopathological examination of the total excision mass was reported as pilonidal sinus. In this article, a rare case of pilonidal sinus in the postauricular region is presented in the light of clinical findings, diagnosis, surgical treatment and current literature.

**Anahtar Kelimeler:** Ear, Pilonidal sinus, Surgery

**Özet:** Tiroid dokusunun anormal büyümesi olarak tanımlanan guatr terimi, klinik pratikte oldukça sık görülen bir sorundur. Retrosternal guatr ise, torasik giriş düzleminin altına uzanan veya kütlelerinin %50'sinden fazlasının sternal çentiğinin altında yer aldığı guatrlar olarak tanımlanmaktadır. Bizde olgumuzda retrosternal guatrı olan hastada servikal insizyonun yanında sternotomi gereksinimi olan olguyu sunmayı amaçladık. 82 yaşında erkek hasta son 1 yıldır olan fakat son 3 aydır neredeyse tamamen beslenememe şikâyeti nedeni ile gastroenteroloji kliniğine başvurmuş, hastaya yapılan özofagogastroskopiye darlık saptanması üzerine iki kez dilatasyon yapılmış, fakat hastanın semptom ve kilo kaybı sebat etmesi üzerine kliniğimize başvurdu. Yapılan tiroid ultrasonu ve toraks tomografisinde retrosternal guatr saptanan hastaya göğüs cerrahisi ile birlikte servikal-torasik yaklaşım ile bilateral total tiroidektomi yapıldı. Postoperatif dönemde sorun yaşanmayan hasta şifa ile taburcu edildi. Sonuç olarak yutma güçlüğü ve trakeal bası semptomları olan hastada retrosternal guatr akılda tutulmalı ve preoperatif dönemde radyolojik görüntüleme yöntemleri kullanılarak yapılacak cerrahi yöntemi dikkatlice seçilmelidir.

**Keywords:** Kulak, Pilonidal Sinüs, Cerrahi

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## 1. Introduction

Pilonidal sinus (PNS) is an inflammatory disease caused by penetration of the skin epidermis by a hair and ending the sinus tract with a pus-filled cavity. It was initially described as a congenital disease, but recently the acquired theory has begun to be emphasized (1). The incidence of PNS, which is observed in males between the ages of 15-30 in particular, is 0.07% (2). Although rare cases have been identified in areas such as the neck, jaw, ears, nose, face, scalp, axilla, umbilical and interdigital areas, PNS is primarily observed in the sacrococcygeal region (3). In the literature, simply a few PNS cases in the postauricular region have been reported (1,4,5). In this article, the PNS case, which is observed in a 28-year-old male patient in the postauricular region, which is rarely seen, is presented in accompaniment with clinical findings, diagnosis, surgical treatment process, and current literature.

## 2. Case Report

A 28-year-old male patient with a growing mass behind the left ear, which was noticed approximately 10 years ago, applied to our hospital's Otorhinolaryngology outpatient clinic. He indicated that the mass grows a little more every year as a result of his

frequent traumatization and that it is infected occasionally and causes the discharge. A total of three fistula ostiums, 1 of which was protruded from the skin, were observed during the physical examination in the left postauricular region. The largest one was large-base, smoothly bounded, mobile, soft consistent, painless, and in the size approximately 2x1 cm (Figure 1). The patient, who did not describe any additional diseases, did not have a similar lesion in another part of his body. He indicated that there was no one in his family who has a similar lesion. Under local anesthesia, mass, mass tract and sinus ostium were excised in total (Figure 2). A primary repair was made after excision (Figure 3). No postoperative complications developed. In the histopathological examination, the macroscopic lesion consists of 1.5x1x0.7 cm brown-colored polypoid skin and subcutaneous tissue, and a cream-colored-yellow lesion that formed a crater towards the skin was observed on the surface of the section. Hair shanks were observed within the lesion. The pathology report indicating that it is a pilonidal sinus was issued in light of current findings. There was no recurrence monitored in the postoperative 6-month follow-up. The patient's consent was received for this case report.



**Figure 1.** Clinical appearance of the lesion in the left postauricular region



**Figure 2.** Complete excision of the lesion



**Figure 3.** The incision was closed with primary repair.

### 3. Discussion

For the first time in history, Hodges utilized the term " pilonidal " by combining the Latin words 'Pilus' 'which means hair, and' 'Nidus' 'which means nest (6). It affects 0.07% of the general population. It is observed three times more common in the males than in the females. Its etiology is not clearly known. Positive family history is an important risk factor with an incidence of 52.4% (1). While the initial focus was on congenital etiology including teratogenic factors and embryonic malformations, today more acquired theory is recognized. Testosterone hormone rising, infections such as folliculitis, friction, impact, recurrent minor traumas of hairy areas, gender, hypertrichosis, keratin disorder, obesity, lack of hygiene, and wounds on the skin are among the factors that make contributions to etiology (3,7). It is observed

as more common in occupational groups such as soldiers, students, and drivers (5). Our patient was a 28-year-old male who was in the military profession. He had these complaints for 10 years. As far as he knew, there was no one in his family having a similar lesion.

Pilonidal sinuses are most commonly found in the sacrococcygeal region with a frequency of 97.8% and in the extra-sacrococcygeal regions with a frequency of 2.2%. Neck, face, jaw, nose, ears, scalp, vulva, scrotum, breasts, axilla, umbilical, interdigital regions are extra-sacrococcygeal areas where PNS is rare (3). In our case, the lesion was located in the postauricular region, which is a rare location. In the literature, reported PNS cases in relation to the isolated postauricular region without extending to the scalp are demonstrated in Table 1.

**Table 1.** Reported cases of postauricular pilonidal sinus

Author's	Year	Age, Gender	Localization
Karatas et al.	2012	18, female	Postauricular area
Salih AM et al.	2015	25, male	Postauricular area
Salih AM et al.	2022	27, male	Postauricular area

While the lesion may remain asymptomatic for many years, it may sometimes present as an acute abscess. Chronic cases manifest themselves with discharge, fistula tracts, and complex sinus formation. There may not be 25-50% hair in PNS (1,5). Our patient indicated that the lesion grows a little more every year and that it is infected occasionally and causes the discharge. On physical examination, it was seen as a broad-based, smooth-circumscribed, mobile, soft-consistent, painless, approximately 2x1 cm mass in the left postauricular area.

If necessary, appropriate radiological imaging techniques can be used together with physical examination for diagnostic purposes. Biopsy can be applied when necessary (3). There are sebaceous cysts, dermoid and epidermoid cysts, eosinophilic granuloma, lymphadenopathy, lipoma, fibroma, osteoma and Ewing's sarcoma in the differential diagnosis (8). In relation to our case, the physical examination was found to be sufficient in the diagnosis, there was no active infection, and the blood picture was normal.

Surgical treatment is very important in order to prevent complications such as osteomyelitis and malignant transformation (8). Even though malignant transformation is extremely rare, PNS cases with squamous cell carcinoma and verrucous carcinoma have been reported in patients who are not treated for a long time period (5,7).

The primary treatment option in PNS cases is surgery (7). The total excision of the sinus tract, complete skin healing and prevention of recurrences are highly significant during the treatment of PNS. Surgical excision, primary

closure after excision, secondary healing or flap repair are among the surgical techniques. Non-surgical treatment methods such as sclerosing agent injections and laser ablation are also available (1,2). Total excision of the lesion together with the fistula tract and sinus ostium under local anesthesia and then primary repair were administered to our patient.

Proper surgical techniques should be administered during the treatment and postoperative complications and recurrences should be closely monitored. Smoking, family history, male gender, obesity, sinus size, and type of surgical method are risk factors in terms of postoperative recurrence and complications. PNS tissue should be completely excised, there should be no dead region at the wound site and infection should not emerge for the purpose of avoiding recurrence. However, there is no treatment method that can completely eliminate recurrence and recurrence can be seen in 2-40% of cases (1,3). In our patient, there was no infection or recurrence observed at the six-month follow-up, and skin healing occurred appropriately.

#### 4. Conclusion

As a result, although it is highly rare, PNS should be taken into consideration in postauricular masses. These lesions, which are easy to control and treat when diagnosed correctly, can rarely turn into malignancy when they remain untreated for a long time period or when incomplete treatment is administered. For this, more case reports and literature information about pilonidal sinuses in the head and neck region are needed.

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### Ethics

**Informed Consent:** The authors declared that informed consent form was signed by the patient.

**Copyright Transfer Form:** Copyright Transfer Form was signed by the authors.

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