# Original Article / Orijinal Araştırma

# Pilonidal Diseases At Pediatric Age Group: Evaluation The Pediatric Surgical Interest Çocukluk Çağında Pilonidal Hastalıklar: Çocuk Cerrahisinin İlgisinin Değerlendirilmesi

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Başvuru Tarihi/Received:

31-05-2013

Düzeltme Tarihi/Revised:

28-06-2013

Kabul Tarihi/Accepted:

30-06-2013

## ÖZET

**Amaç:** Çocuklardaki pilonidal hastalıklarının çok az değerlendirilmesi ve yazılan makalelerin çok az olması nedeni ile pilonidal sinuslerdeki tecrübelerimizi literature dahil etmek için bu çalışma yapılmıştır.

**Metot:** 2005-2011 yılları arasında Keçiören Eğitim ve Araştırma hastanesindeki dosyalardan yararlanılmıştır. Yaş, cinsiyet, tedavi, yatış süresi, komplikasyonlar ve hastaların kontrolleri incelenerek klinik yaklaşımımızın özellikleri değerlendirilmiştir. Sonuçlar literatür eşliğinde tartışılmıştır.

**Bulgular:** 27 çocuğa pilonidal hastalık tanısı konuldu. 9 erkek ve 18 kız idi. Ortalama yaşları erkek ve kızlarda sırasıyla 15.5 ve 15 idi. 7 hasta pilonidal sınüs nedeni ile opere edildi. Hastane kalış süreleri opere olan çocuklar için 4.5 gündü. 20 hasta çeşitli medikasyonlarla tedavi edildi. Cerrahi grubu hastaların 4'ünde komplikasyon görüldü.

**Sonuç:** Literatür incelememizde çocuklardaki pilonidal sinüs hastalıkları ile ilgili çok az bilgi olduğu anlaşılmıştır. Verilerimizin ek bilgi sağlayacağını ve pediatrik yaş grubundaki geç presentasyonlarda tedavi açısından güven vereceğini düşünmekteyiz.

Ayrıca çocuklarda pilonidal hastalıkların değerlendirilmesinde standart prosedürler olmadığını ve bu durumun değerlendirme zorluğu ve karışıklıkları yaptığı kanaati oluşmuştur.

Anahtar Kelimeler: Pilonidal; Bozukluklar; Çocuklar

## **ABSTRACT**

Background: We want to add our experience about pilonidal sinus of children in literature aspilonidal disorders are rarely evaluated in childhood and written articles are very few.

Material and Methods: We used Keçiören Education and Training Hospital documents from 2005 to 2011 to evaluate the age,gender, treatment, hospitalization days, complications and controls of the patients to define the characteristics of our clinical approach on this subject. Results were discussed according to the literature.

Results: Twenty-seven patients were diagnosed as pilonidal disease. Nine were male and 18 were female. Median ages for male and female patients were 15.5 and 15 respectively. Sevenwere operated for pilonidal sinus. Hospital stay was median 4.5 days for operated children. Twenty were treated with medications. There were 4 complications of patients in surgery group.

Conclusion: When the literature is evaluated, it will be figured out that little information is present about pilonidal diseases for children. We suggest that our data will add information and encourage later presentation on pilonidal diseases for pediatric age group. We also realized that standard evaluation procedures have not still been present for the disease for children that causes difficulties and conflicts in assessments.

Key Words: pilonidal disorders, children

### INTRODUCTION

In literature, there are different definitions about pilonidal sinus. Flannery et al defined pilonidal disease as an intergluteal reaction caused by epithelial and hair cell nidus (1). Nasr et al defined pilonidal disease as an in-driven hair causing infection. (2). Fike et al defined it as bury of loose hair shafts. (3). According to the definitions of these three, the disease appears to be common in the area and local hair. Disease is usually seen in adolescence and early adulthood (1-2). In contrast to this, very few reports in pediatric surgery are present.

The optimal treatment strategy is still a matter of discussion. Many different approaches have been put forward, ranging from a conservative treatment to an extensive surgical excision. Some of the the surgical management for pilonidal sinus are; excochleation, radical excision, excision with or without reconstructive cutaneous flaps. Wide excision with primary or secondary wound healing closure is probably the most often performed procedure.

We evaluated our pilonidal diseases cases to compare the results with literature. We, also, aim to add our experience of pilonidal sinus especially to reinforce the pediatric surgical database.

#### MATERIAL and METHODS

We evaluated Keçiören Education and Training Hospital documents between 2005 and 2011 to demonstrate the age, gender, treatment, hospitalization days, complications and control periods of the patients. We aimed to define the characteristics of our clinical approach on this subject. Three of the authors worked in the hospital for a while and 2 authors have still been working. Results were discussed according to the literature.

#### **RESULTS**

In this period, twenty-seven of 9,958 patients were diagnosed as pilonidal disease. Nine were male and 18 were female. Median ages for male and female patients were 15.5 and 15 respectively. Seven were operated for pilonidal sinus. Hospital stay was median 4.5 days. Twenty were treated with medications. There were 4 complications in surgery group. One patient had infective drainage for two times and two patients had recurrence. Findings were shown in Table-1.

### DISCUSSION

"Ectodermal sacrococcygeal cysts and sinuses" is more appropriate as a name for the diseaseaccordingtoGage and colleagues, even if advised, "pilonidal" in Latin means nesting in your hair (4). Pilonidal sinus contains in epithelial cells and hairs (1). Deeper parts of the sinus tract are structured by granulation tissue, and some sinuses are not deeper than 1-2 mm from the surface (1).

Nasr et al reported that the incidence for pilonidal disorders were 1.2-2.5 in 1000 patients (2). In our study, the incidence is 2.7 in 1000 patients. Nasr reported that the male/female (M/F) ratio of their series was 1/1 (2). Fike reported that 58% of their patients were female in their series (3). In our series, M/F ratio is 1/2.

Pilonidal sinus is seen among young patients in a high incidence (1). For Fike, the median age for pilonidal disease was 14.9 years. (3). Nasr reported similar finding for the mean age of their series (2). In our evaluation, median ages for male and female patients were 15.5 and 15, respectively.

Table-1: Distribution and characteristics of pilonidal disease in our series.

Treatment	Number	Age (Median)	Gender (M/F)	Com pl	ospital stay (days)	<b>Control Examinations</b>
Medical	20	15.5	7/13	0	0	3
Surgery	7	15	2/5	4	4.5	5

M/F: Male/ Female, Compl.:Complication

Anatomically, pilonidal sinus is seen between caudal region and upper verge of the anus (1). Two or three pilonidal sinuses are usually seen in a patient (1). Abscess form nearly at 50% of the patients before definitive treatment (2). Painful swelling and sinus discharge are the most seen complaints (1). Cleansing is useful to make the conditions better for healing (1). In our evaluation, the main complaint for the surgery group was also abscess drainage causing discomfort and painful swelling. Unfortunately, complaints were not reported in details for the medical treatment group.

Various operations for pilonidal sinus like simple incision and drainage, Rhomboid excision and Limberg flap, excision the roof of the sinus tract with marsupialization, excision with secondary management, flap repair with or without primary excision can be used (2-3). Flannery et al reported that surgeons' trends for operation is minimal excision to protect the original tissue(1). Number of the operated patients was 7. Seven patients were operated by excision and primary closure. Fike et al reported that primary closure is suitable because of fewer operations, follow-up and lower charges (3). Nasr et al reported that patients operated with excision and primary closure were hospitalized for 8 days medially(2). In our series, primary closure after excision is the only type of operation, and median hospitalization day was 4.5 days. This result is less than Nasr's series. In fact, our series had fewer patients than Nasr's series, and this might cause wrong decision for shorter hospitalization time (2).Patients were followed up to 3 control examinations for medical treatment group. Control examinations for surgery groups were 5. are enough literature for general surgeons. Therefore, pilonidal sinus operations for adults are not attractive for authors too much. However, pediatric evaluations

for pilonidal sinus in literatureare surprisingly insufficient. Pediatric findings have to be published. So, these reports can stimulate to investigate predictive factors. Also unexpected results can be put forward to reduce the incidence or surgical indications of the disease in the future. It can even be speculated that evaluations at pediatric age group will be also effective on adults' surgeries. We prepare this article to add our knowledge to literature. We believe that more studies on this subject can help to define algorithms.

Pathologic and financial effects of the diseases are also important for pilonidal sinus but this article does not aim to evaluate these points.

In conclusion, our operations with the excision and primary closure seem to be reasonable according to the hospitalization period. There is a group treated medically consisting of more patients than surgical group. This means, medical treatment and cleansing can't be underestimated. As seen in our series and literature, pilonidal sinuses for adolescents are not handled appropriately. Articles must be increased for this purpose.

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