

Management of Female Sacrococcygeal Pilonidal Sinus Disease in Children: A Case Report

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Abstract

Sacrococcygeal pilonidal sinus disease is common in children and not common in female patients. It is seen in adult women 2.2 to 4 times less than men. The most common age range is between 10 and 40. The disease reduces the quality of life of patients with symptoms such as pain and chronic discharge. Variable surgical techniques have been described for the treatment of pilonidal disease. We report the case of a 13 year old girl, who presented with painless symptom and chronic bloody discharge whose histology was suggestive of pilonidal sinus disease.

Keywords: *Sacrococcygeal Pilonidal Sinus Disease; Pediatric; Karydakis Flap Repair*

Introduction

Although it is not as common as it is in adult population, sacrococcygeal pilonidal sinus disease (SPSD) is not very rare in children [1]. Based on previous retrospective study, pilonidal disease is a common and acquired disease especially of young male adults. It has an estimated incidence of 26/100,000 in the general population [2]. It is seen in adults women 2.2 to 4 times less than men [3]. The most common age range is between 10 and 40 [4]. In many studies, female gender is only between 1 - 5% of patients [2]. Although male/female ratio in some adult series is considerably high, this ratio tends to lower value such as 1/1.4 in pediatric group [5]. There are many different approaches to SPSP management [6]. Various surgical techniques have been described for the treatment of SPSP, and optimal choice remains controversial [7].

We report a case of sacrococcygeal pilonidal disease in female pediatric patient. Additionally, we discuss the clinical approach and treatment of SPSP.

Case Report

A 13-year-old hirsute girl presented with a 1 year history of insidious onset of chronic bloody discharge over the cutaneous opening at back. She had painless symptom. She denied any history of trauma at back. The patient's general appearance; dark hair and skin, excess body hair, and BMI 27 kg/m².

Physical examination revealed a 1 cm diameter cutaneous opening of sinus tract at back (S4 vertebral level) with hair embedded and bloody discharge (Figure 1). The preferred imaging method was ultrasonography but we could not receive the detail of useful informa-

tion to eliminate anorectal fistula or posterior anorectal tumor or sacral osteomyelitis so the preoperative imaging study from magnetic resonance imaging playing an important role in the planning and treatment for our patient. The study revealed single abnormal sinus tract with cutaneous opening at superior aspect of midline buttock region (about upper S4 vertebral level) and blinding ending at 2nd intercoccygeal joint level. She had a primary sinus opening and classification of her BMI in overweight category. So, we chose the management of the primary disease with oblique excision and flap procedure (Karydakias procedure). The procedure was done under general anesthesia. The suction drain was placed and brought out well laterally. Wound dressing was done on 2nd postoperative day and drain was removed 7 days later. Patient was discharged on 6th postoperative day. The suture were removed on the 15th postoperative day. On 10th postoperative day, the patient presented with postoperative serous collection in the wound. The collection was let out following which wound healed by secondary intention within 6 weeks of regular dressings. Following suture removal and wound healing by secondary intention at the end of 10th postoperative week. The patient were followed-up being 4 months and no recurrence were noted (Figure 2).



Figure 1



Figure 2

Discussion

Sacrococcygeal pilonidal sinus disease (SPSD) is a worldwide problem affecting, usually young men and women that requires surgical intervention [8]. There is a limited number of pediatric studies for Excision with flap closure and is recommended to be used in complicated cases [9]. This method has a lower rate of recurrence compared to other excision methods [10]. The principle of Karydakis procedure being flattening of the natal cleft and lateral shift of midline (scar) which prevents lodging of hair in the natal cleft and recurrence. There is seldom seen problems like flap tip necrosis with Karydakis procedure. Complication noted was serous wound collection in our patient. The complication seems to be occurred due to nature of the flap technique and because of larger tissue excision leading to bigger dead space comparing to primary midline closure. Our case resolved by local antibiotherapy, recurrent wound dressings and drainage by secondary intention. The frequently reported disadvantage of flap methods is the high perception of tension with cosmetic concern, can be very important for female patient [11]. Our pediatric patient had only high perception with tension from flap method. The most common causes of recurrence were stated as poor local hygiene, overweight, wide or deep sinus pit. So postoperative recommendation for laser epilations and slimming was considered to our patient.

Conclusion

Karydakis flap procedure is an effective procedure for management of sacrococcygeal pilonidal sinus disease with reproducible low recurrence rates.

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