

DAHA ÖNCE OPERE EDİLMİŞ NÜKS PİLONİDAL HASTALIK TEDAVİSİNE FARKLI BİR YAKLAŞIM

A Different Approach to the Treatment Ofpreviously Operated Recurrent Pilonidal Disease

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ÖZET

Amaç: Bu çalışmanın amacı, pilonidal sinüs hastalığı için önceden ameliyat olmuş tekrarlayan pilonidal hastalığı olan hastalarda kristalize ve likid (% 80) fenol etkinliğini araştırmaktır.

Gereç ve Yöntem: Ocak 2010- Ocak 2013 arası daha önce pilonidal sinüs hastalığı nedeni ile opere edilmiş ve sonrasında nüks nedeni ile fenol tedavisi verilen 44 hasta çalışmaya dahil edildi. Yaş, cinsiyet, apse varlığı, eşlik eden hastalıklar, önceki cerrahi işlem, sinüs sayısı ve yerleşimi, fenol uygulama prosedürü ve sayısı ve takip süresi retrospektif olarak incelendi.

Bulgular: Çalışmada 36 erkek ve 8 kadın bulunmaktadır ve medyan yaş 21.4 yıl (14-36) dir. Tüm hastaların pilonidal hastalık operasyon öyküsü ve ayrıca 12 (% 27) hastada sinüs apseleri vardı. Kristalize ve likid fenol tedavisi arasında istatistiksel olarak anlamlı bir fark yoktu (p: 0.360). Cinsiyet ve yaş tedavi başarısızlığı için istatistiksel olarak anlamlı risk faktörleri olarak bulunmamıştır (p: 0,539, p: 0.367). Sinüs sayısı tedavi başarısızlığı için istatistiksel olarak anlamlı bir faktör olduğu saptandı (p: 0.001)

Sonuç: Fenol tedavisi pilonidal sinüs hastalığı tedavisi için nüks vakalarda da kullanılabilecek basit ve etkili bir yöntemdir.

Anahtar Sözcükler: Pilonidal hastalık; Nüks; Kristalize fenol; Likid fenol

ABSTRACT

Aim: The aim of this study is to investigate the effectiveness of crystallized and liquid (80%) phenol in patients with recurrent pilonidal disease who had prior surgery for pilonidal sinus disease.

Material and Method: We have included 44 patients who had previously surgery for pilonidal sinus disease and phenol treatment was performed from January 2010 through January 2013. Age, gender, presence of abscess, comorbidities, previous operating mode, sinus number and placement, phenol examined application and the number of procedure and follow-up period were retrospectively analyzed.

Results: The study comprised of 36 men and 8 women with a median age of 21.4 years (range, 14–36). All patients had a history of pilonidal disease operation and also 12 (27%) patients had sinus abscesses. There was no statistical difference between the crystallized and liquid phenol treatment (p: 0.360). Gender and age were not found to be statistically significant risk factors for treatment failure (p:0,539, p:0.367). The number of sinus orifices was found to be a statistically significant factor for treatment failure (p : 0.001).

Conclusion: Phenol treatment is an effective and a simple method of pilonidal disease and can also be used recurrent previously operated pilonidal disease.

Keywords: Pilonidal disease; Recurrence; Crystallized phenol; Liquid phenol

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INTRODUCTION

Sacrococcygeal pilonidal disease is characterized by chronic discharge and that affects the quality of life. The incidence of pilonidal disease is 26 per 100,000 and the majority of patients are men in the 20-30 age range(1).A lot of medical and surgical procedures was applied in the treatment of pilonidal disease but stil there are no consensus on the ideal treatment. Expectance of ideal treatment is easy to apply, short of hospital stay, less business loss, low recurrent rate and low cost. All of surgical techniques have different recovery time, success rates and costs. In the previous studies separation of tissues and postoperative infection rates were significantly higher in primary repair of pilonidal disease than the Limberg flap technique and therefore the superiority of the flap technique was adopted to the primary repair (2,3). In the treatment of recurrent disease has yet conservative and surgical options.

Phenol treatment is a well known method for nearly 50 years. Its popularity has been increasing in the recent years and it is the first treatment option in the certain clinics. Crystallized and liquid form of phenol has antiseptic, sclerosis and anesthetic properties. In this study we evaluated the results of crystallized and the liquid phenol application in the treatment of recurrent previously operated pilonidal disease.

MATERIAL AND METHODS

We have included 44 patients who had previously operated pilonidal disease and phenol application was performed for recurrence disease from January 2010 through January 2013. Age, gender, presence of abscess, comorbidities, previous operating mode, sinus number and placement, phenol examined application and the number of transactions and follow-up period were retrospectively analyzed. Patient follow-up was made in the 1. month, 3. months, 6. months and 12. months at the outpatient clinic and later reached to patients by telephone. There was no additional problems of patients. Patients were informed about the procedure to be performed and written consent was obtained. Procedures were performed by the same surgeon in all patients. Phenol was performed under local anesthesia on an outpatient clinic and made no laboratory examination. Antibiotic prophylaxis was not

used routinely and 500 mg Ceruroxime were used only to patients with abscesses for 5 days.

Surgical procedure

All procedures were performed in the outpatient clinics or in the dressing room. Patients were included in the prone position and operations area was shaved and then cleaned with povidone iodine and also ointments was placed in the anal region. We preferred 2% lidocaine for local anesthesia + adrenaline (Jetokain, Adeka ilaç sanayi, İstanbul) and applied around the sinus orifices. Sinus orifices has been expanded with the mosquit clamp and hair and infected tissues were removed and sinus cavities were bled by curette. Sinus environment was maintained with nitrofurantoin ointment (Furacin, Eczacıbası Ilac San., İstanbul, Turkey) due to burning and irritant effect of the phenol. Crystallized phenol (Botapharma laboraties, Ankara, Turkey) was used patients with up to sinus number two and 80% phenol solution (Phenol , Ankara, Turkey) was used to sinus number three and more patients because of the application period is shorter and simpler. Crystallized phenol placed into the sinus aid of forceps and was waited about 5 minutes and then washed with saline. Liquid phenol(80%) (1-2 ml) was injected under reduced pressure into the sinus cavities and after waiting 5 minutes washed with saline. We repeated this application up to 3 times at 3-week intervals according to the state recovery.

Statistical Analysis

All data were collected and analyzed with SPSS for Windows (version 15.0; SPSS, Chicago, IL). Statistical analysis was performed using the Chi-square or Fisher exact tests and Student t test. Age, gender, history of abscess ,history of prior surgery, number of sinus openings, localization of sinus openings, methods of phenolization and the number of phenolization sessions were analyzed .

RESULTS

The study comprised of 36 men and 8 women with a median age of 21.4 years (range 14–36). All of patients had a history of pilonidal disease operation and also 12 (27%) patients had sinus abscesses. Previous surgery methods were the primary repair (30), karydakias flap

procedure (10) and Limberg flap procedure (4). Mean time after the first operation was 14.8 months. (9-30 Months) .The number of sinus orifices ranged from 1 to 5 (mean, 2.9).

Crystallized phenolization was performed for 20 patients (45.5%) and liquid phenolization was performed for 24 patients (55.5%). The average number of phenol applications was 2.47 (1-3).

The mean follow-up time after phenol applications was 24.1 months (12-36 months).

All procedures were performed in the outpatient clinics or in the dressing room and patients had to return to work on the same day. During and after the phenol treatment no complications were observed such as superficial burns, abscesses and cellulite.

We described the healing as perfect skin epithelization

and together with symptomatic relief. One patient after crystallized phenol treatment and six patients after application of liquid phenol, disease was recurred and they were treated with and Limberg flap technique. There was no statistical difference between the crystallized and liquid phenol treatment (p: 0.360). Gender and age were not found to be statistically significant risk factors for treatment failure (p:0.539, p:0.367). Patients with a history of abscesses was not a statistically significant risk factors (p:0.091). The number of sinus orifices was found to be a statistically significant factor for treatment failure (p:0.001). There were no differences between the localization of sinus openings and treatment failure (p:0.631). The demographic data , operative procedures, complications, recurrence and result of patients was shown in Table I. The patients were followed-up for a mean period of 24.1 months (range, 12–36). 7 patients was treated with the flap procedure because of recurrence.

Table 1 . Demographic, operative procedures, complications, recurrence and result of patients

Parameters	Patients(n:44)	Treatment failure(n:7)	P value
Sex (male:female)	36:8	6:1	0.539
Mean age (years)	21.4(14-36)		0.367
History of prior surgery (primer:karydakis:limberg)	30:10:4	5:2:0	0.657
Mean sinus openings	2.9(1-5)		0.001
Sinus orificeslocalization (midline:lateral)	33:11	4:3	0.631
History of abcess drainage (positive:negative)	12:32	4:3	0.091
Methods of Phenolization (cristallized and liquid)	20:24	2:5	0.360
Mean Phenolization no.	2.4(1-3)		0.890
Follow-up period (mounths)	24.1(12-36)		

DISCUSSION

Pilonidal disease is often appeared in intergluteal area and leading to the loss of jobs in young adults (4). A lot of surgical and medical treatment methods have been tried. They are leaving open, excision and primary closure and flap techniques (5-7). The aim of chosen treatment is to be less rate of recurrence and complications, short time of returning to work, the patient satisfaction and cost effective (8).

In a study which was comparing primary repair with secondary improvement, recurrence rate was found

to be less in secondary healing group cost but in the secondary healing process was long and thus the cost was more than primary repair (9). The flap technique has been more successful in the some studies (10). However in a study authors have been shown that, in uncomplicated cases, , the excision and primary repair was more successful (11).

Despite many studies still there is no consensus on surgical methods. Therefore, alternative treatment methods have been investigated. One of them is the phenol treatment. Phenol has antiseptic, anesthetic

and sclerosis properties . It was first described in 1964 by Maurice and Greenwood (12). The phenol treatment could be applied in outpatient clinic with local anaesthetic and after without the patient's hospital stay , they might be returned to work on the same day. Therefore, the cost was very low compared to routine surgical procedures and the success rate was similar to other surgical procedures (13).

The most common complications of the phenol treatment were pain, abscesses, cellulitis and the formation of false tract caused by high pressures of implementation. (14). Any complications has not developed in our study. In the several studies, success of practice was defined as symptomatic relief (15). We described the healing as complete skin epithelization and together with symptomatic relief as well as in the other studies (16). In the studies success rates were between % 60 and % 100 (14). In our study we examined 44 patients who had history of pilonidal disease surgery. There was no statistical difference between the previous operation mode and the likelihood of recurrence (p:0.657). The follow-up period was 24.1 months after the treatment (12-30 months). In our study, the total success rate was found to be %85. Liquid phenol (24 patients) success rate was calculated as 75% and crystallized phenol (20 patients) as 95%. Recurrent cases were treated with Limberg flap technique. There was no statistical difference between the crystallized and liquid phenol treatment (p:0.360). In our study, the presence of an abscess while not statistically significant (p:0.173), number of sinus orifices (mean: 2.9) was found statistically significant (p = 0.001).

We limited the treatment in third application because of impatience and expectation immediate treatment of patients. In our study, phenol treatment was performed to patients who has been operated previously as a first treatment option and similar success rate was found in the nonoperated patients in the other studies.

CONCLUSION

The effectiveness of the phenol treatment of pilonidal disease has been proven in several studies with simple application, low recurrence and complication rates ,low cost and it can be performed in outpatient clinics

with only local anesthetic agent for primer and also operated recurrent disease.

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