

Does Advanced Age Increase the Recurrence of Perianal Fistulas?

İleri Yaş Perianal Fistül Nüksünü Artırıyor Mu?

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Abstract

Introduction: Perianal fistulas are diseases that treated difficulty. It is usually easy to diagnose; but it may need additional tests. Age is an important factor in wound healing. In this study, we examined whether the advanced age has a relevance with the recurrence of perianal fistula.

Methods: There were 242 patients between January 2010 and January 2016 with fistulotomy + curettage. These patients had been operated at least twice because of the recurrences(13 patients two times and 5 patients three times). These patients' gender, age, type of fistula and distance from external opening to the anal canal was recorded, retrospectively.

Results: When comparing Group 1 and Group 2; was not statistically significant in terms of the gender, distance from external opening of the fistula to the anal canal and fistula type. In additionally, there was no statistically significant difference with advanced age.

Discussion and Conclusion: In this study we found that; age, gender, distance from the opening of the fistula to the anal canal and fistula type do not seem influential in the recurrence of perianal fistulas. Age has emerged as an important factor in wound healing but in this study, it was not statistically significant at fistula recurrence.

Keywords: Anal Fistula, Cell Senescence, Relapse

Öz

Giriş ve Amaç: Perianal fistüller zor tedavi edilen hastalıklardan birisidir. Genellikle tanısı kolaydır; ancak ilave tetkikler gerekebilir. Yara iyileşmesinde yaş çok önemli bir faktör olarak karşımıza çıkmaktadır. Bu çalışmamızda, ileri yaşın perianal fistül nüksü ile bir ilgisi olup olmadığını inceledik.

Yöntem ve Gereçler: Ocak-2010 ve Ocak-2016 tarihleri arasında fistülotomi+küretaj yapılan 242 hasta geriye dönük olarak incelendi. Bunlardan 18'i nüks nedeniyle en az iki defa daha(13 hasta iki, 5 hasta üç kez) opere edilmişti. Bu hastaların cinsiyet, yaş, fistül tipi ve dış ağzının anal kanala uzaklığı retrospektif olarak kaydedildi.

Bulgular: Grup 1 ve Grup 2'yi karşılaştırdığımızda cinsiyet, fistül dış ağzının anal kanala olan mesafesi ve fistül tipi açısından istatistiksel olarak anlamlı bir fark bulunmadı. Bunun yanında ileri yaşın, fistül nüks sıklığında etkili olduğuna dair istatistiksel olarak bir fark tespit edilemedi.

Tartışma ve Sonuç: Yaptığımız bu çalışmada perianal fistüllerin nüksünde yaş, cinsiyet, fistül ağzının uzaklığı ve fistül tipi etkili gibi görünmemektedir. Yara iyileşmesinde yaş, önemli bir faktör olarak karşımıza çıkmaktadır, fakat bu çalışmada fistül nükslerine olan etkisi istatistiksel olarak anlamlı bulunamamıştır.

Anahtar Kelimeler: Anal Fistül, Hücre Yaşlanması, Nüks

Introduction:

Patients usually complain of flow with perianal fistulas from the perianal region and usually diagnosed by simple physical examination. This disease is negatively affects patients' lives, reduces the quality of normal working and living conditions. Recovery will not be easy because of polluted areas.

In the case of can not diagnosed, they should be applied advanced diagnostic methods like anosopes, rectosigmoidoscopes or MRI(Magnetic Resonance Imaging). The diagnosis is made with anoscopy and rectosigmoidoscopy and MRI also analyzes the course of the fistula in the tissue. In this way, we try to determine the most appropriate treatment approach.

Age emerges as a factor of effecting and delaying the treatment in most diseases. This delay are believed to due to the destruction of lipids and nucleic acids by increasing oxidative stress and intracellular proteins, also it is thought to be related to decreasing neovascularization and impairing fibroblast function in the healing process(1).

Materials-Methods:

In this retrospective study, we want to investigate the recurrence of perianal fistula patients if is dependent with the patient's age that we operated in our clinic. We examined the patients which first operations were fistulotomy + curettage

operation of cryptoglanduler perianal fistula diseases between January 2010 and January 2016 dates, retrospectively.

Patient informed consent were not received because the study is retrospective.

A total of 242 patients had a fistula and these patients had been fistulotomy + curettage operation. Eighteen of these patients was operated again because of recurrence. Mean age was 41.16 ± 14.66 of all patients with recurrence. Fifteen were male and three were female of these 18 patients. Thirteen patients had surgery twice(Group 1) and five patients had surgery three times(Group 2) for recurrence.

Statistical Analysis:

Kolmogorov-Smirnov test was applied for the obtained data using SPSS(18.0 for Windows; Inc. Chicago, IL, USA) statistical software. Independent Samples T test, Pearson-R test, Spearman's Rho test, Fisher's Exact Test and Chi-Square test were performed after observing the values were parametric.

Results:

According to our data, there were no statistically significant difference according to gender, external opening of the fistula from distance to the anal canal and age between Group 1 and Group 2. Again, a statistically significant difference could not be determined compared to the obtained results with fistula types. According to the results obtained from our study, the

frequency of recurrence in advanced age is not generally correlated with each other. Namely, fistula recurrence were not associated with advanced age($p=0.443$)

Table: Correlation table in our perianal fistulas

	Group 1	Group 2	p
Age	39,461±15,025	45,6±14,258	0,443
Gender(M/F)	11/2	4/1	1,0
Distance to the anal canal (cm)	3,769±0,599	4±1,414	0,624
Fistula Shape (n)			
Intersphincteric	9	1	
Transsphincteric	4	3	
Suprasphincteric	0	1	

($p<0.05$ is statistically significant)

Discussion:

Perianal fistulas are diseases which are difficult to treat and can create problems to both surgeons and patients in terms of relapse. Because of perianal discharge causes deterioration of the social life, there are high expectations in the first operation. Depending on various factors, relapsing creates serious disappointment at the patients.

Cryptoglandular infections, Crohn's Disease, radiotherapy and secondary malignancies are within the etiological factors(2, 3). The most

problematic of these is Crohn's disease. Inflammatory processes develop in Crohn's disease in the colonic area, as is known; and they are probably the biggest obstacle in front of healing.

Treatment options include fistulotomy, core out fistulectomy, seton placement, endorectal flap advancement, anocutaneous flap advancement, excision and internal sealing, cyanoacrylate or fibrin injection, fistula plug placement, video-assisted anal fistula treatment(VAAFT) and ligation of the intersphincteric fistula track(LIFT)(4).

Perianal fistula disease is seen 12.3 in men and 8.6 in women per 100.000 people(2). For the first time, classified by Parks et al(intersphincteric, transsphincteric, suprasphincteric and ekstrasphincteric)(5)but now are called the high fistulas and low fistulas. High perianal fistulas comprises middle and/or top third part of the anal sphincter complex, despite low perianal fistulas comprises the first part of this complex(6).

Perianal fistulas are surrounded by tough fibrous tissue tubules filled with granulation and are usually as the result of perianal abscess. Its treatment is surgical and tract of fistula shape directly affects the complications. Wrong decisions, results with recurrence of the disease or fecal incontinence(7).

Crohn's disease has a high relapse rate and usually different treatment from cryptoglandular fistulas(8). Stem cells injections derived from adipose tissue may be curative related with these diseases. However, the main reason for perianal fistulas are cryptoglandular (9).

Advanced age affects negatively in wound healing. Diabetes, secondary infections and malignancies are the factors delaying wound healing besides age. In a study that assessing the duration of the recovery has been determined that delaying of 1.9-day on epithelialization in elderly patients compared to younger patients(10). Related with age, occurs a decrease in number of antigen-presenting cells(for example Langerhans cells, mast cells)(11). Older endothelial cells can not synthesize enough nitric oxide which is a vasoactive mediator. Accordingly, decreasing in capillary permeability and neutrophil diapedesis occur. Overall, the immune response appears to not has been sufficient(12).

Conclusion:

It is clear that advanced age cause delays in wound healing in patients. In this study, we examined starting from the assumption of the correlation on advanced age with delayed epithelialization between the frequency of recurrence but have not obtained a statistically significant result. Probably, other factors are more effective than age in the recurrence of perianal fistulas.

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