KLİNİK ARAŞTIRMA

Labial Yapışıklık Tedavisinde Halen Östrojen Kremini mi Tercih Ediyorsunuz

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ÖZET:

Giriş ve Amaç: *İnfantil dönemde teşhis edilen labial sineşi, etyoloji ve tedavi modaliteleri açısından farklılık gösterebilir. Bu çalışmanın amacı, labial sineşinin tedavisinde östrojen kremi yerine %0,1'lik kortikosteroid krem kullanılması etkinliğinin ölçülmesi, daha önceki tedaviye cevabın, klinik sunumun ve hasta demografisinin değerlendirilmesidir.*

Gereç ve Yöntem: *Bu çalışma 1 Şubat 2004 ve 1 Ekim 2005 tarihleri arasında 18 ay boyunca ayaktan takip edilen labial sineşili 17 kızla ilgili olarak yapılan prospektif bir araştırmadır. Ailenin sosyokültürel özellikleri, perine temizleme yöntemleri, perine hijyeninin durumu, üriner semptomlar, perine dermatiti veya travma öyküsü, önceki tedaviler ve nüks sorgulanmıştır. Bütün hastalara poliklinikte EMLA krem kullanılarak manüel veya hemostat klemp ile basit bir ayırma uygulanmıştır. Adezyonların ayrılmasından sonra en az 3 hafta boyunca günde 2 kez labium minora %0,1'lik kortikosteroid krem kullanılmıştır. Tedavi ve takip sırasında anne-baba sorgulanmış ve çocuk muayene edilmiştir. Bulgular: Hastaların ortalama yaşı 18 ay idi (4 ay ila 4,5 yaş arası). Ailelerin sosyokültürel statüsü iyiydi. Bütün hastaların perine hijyeni çok iyiydi. Annelerin tamamı çocuklarının perine temizliği konusunda titizdi. Hatta bunlardan bazıları çocuklarının perine temizliği konusunda çok takıntılıydı. Bazıları ıslak mendil bazıları da ıslak pamuk kullanıyordu. Bunların tamamı en kaliteli bebek bezi kullanıyordu. Çocukların hiçbirinde vulvovajinit, bez dermatiti veya bilinen bir genital travma hikayesi yoktu. Hiçbirinde üriner sistem enfeksiyonu semptomu görülmemişti. Labial sineşili hastaların hiçbirinde bakteriüri tespit edilmemişti. Hastalardan üçünde önceden labial sineşi mevcuttu ve bunlara başka merkezlerde premarin krem uygulanmıştı. Bu çalışmada; dikkat çekici bulgular, hastaların perine hijyeninin kötü olmadığı, ikinci olarak da hastaların tedavisinde herhangi bir östrojen krem kullanılmamış olmasıdır. Adezyonların ayrılmasından sonra 3 hafta boyunca %0,1'lik kortikosteroid krem kullanılmıştır. Ortalama takip 2 ila 3,5 yıldı. Östrojen kremlerinin sebeb olduğu meme tomurcuklanması, labial kanlanmada artış ve hiperpigmentasyon gibi yan etkilerin hiçbiri gözlenmemiştir. 3 hastada 5 ay, 11 ay ve 16 ay sonra (%1,7) nüks izlenmiştir.*

Sonuç: *Perine mukozasının mekanik olarak yaralanmasına sebep olan aşırı temizleme gibi mikrotravmaların labium minor adezyonuna yol açabileceğini düşünmekteyiz. Klinik gözlemlerimize göre; labial yapışıklığın primer tedavisinde veya tedavisi yetersiz kalmış olgularda östrojen krem kullanımında karşılaşılan perineal hiperpigmentasyon, göğüs büyümesi ve ağrısı gibi istenmeyen yan etkiler görülmediği için kortikosteroid krem kullanımı etkin ve güvenilir bulunmuştur.*

Anahtar Kelimeler: *Korticosteroid Krem, Betamethasone Krem, Estrogen Krem, Labial Yapışıklık, Labial Sineşi, Labial Füzyon, Çocuk*

SUMMARY:

Do you still prefer estrogen cream in the treatment of labial synechiae

Background and aim: *Labial synechiae diagnosed beyond the infancy may still present a dilemma about etiology and treatment modalities. The purpose of this study is to evaluate the efficiency of 0.1% corticosteroid cream instead of the conjugated estrogen cream for the treatment of labial synechiae.*

Material and Methods: *This study was carried as a prospectively. 17 girls with labial synechia between February 01, 2004 and October 01, 2005 (18 months) were evaluated. Sosyocultural characteristics of family, cleaning methods and materials of perineum, status of perineal hygiene, history of urinary symptoms or perineal dermatitis or trauma, previous treatments were asked. After basic separation with manual or hemostat clamp, 0.1% corticosteroid cream was applied twice a day to the labia minora for at least 3 weeks. The patients were reevaluated accordingly at follow up period.*

Results: *The mean age of the patient was 18 months (r: 4 months to 4.5 years). Sosyocultural status of patients families were good levels, perineal hygiene of all patients were very good. All mothers were very careful about perineal cleaning of their child;*

and same of them were also very obsessive. Same of them were using wipe, some of them were using only wetted cotton. All of them were using best quality diaper. No child had history of vulvovaginitis, diaper dermatitis or known genital trauma. None of them had symptoms of urinary tract infection. Any patient with labial synechia was not screened for bacteriuria. Three patients with labial synechiae had used estrogen cream by the other centers previously. All patients only treated basic separation with manually or hemostat clamp after topical anesthetic cream have been used in the office. After lysis of adhesions, 0.1% corticosteroid cream was used during 3 weeks. Average follow up was from 2 years to 3.5 years. No adverse effects were noted in any patients like estrogen creams like breast budding, labial engorgement, and hyper pigmentation. Recurrence was seen in three patients 5 months, 11 months, 16 months later (%17).

Conclusions: *We think that micro traumas like over cleaning causing mechanical mucosal injury of the perineum may lead to adhesion of labia minora. According to our clinical observations, corticosteroid cream appears to be a safe and effective treatment of labial adhesions as primary therapy or in patients that have failed previous therapies; and it may avoid the undesirable side effects of breast budding and hyper pigmentation that can be associated with estrogen cream.*

Key words: *Corticosteroid cream, Betamethasone cream, Estrogen cream, Labial adhesions, Labial synechiae, Labial fusion, Child*

INTRODUCTION

Labial synechiae is defined as either partial or complete adherence of the labia minora (1, 2, 3, 4). Other names for this condition include vulvar fusion, synechiae of the vulva, adhesions of the labia minora, and agglutination of the labia minora (3). Labial synechiae diagnosed beyond the infant may still present a dilemma about etiology and treatment modalities. Many labial adhesions are asymptomatic and may not come to the attention of the medical community.[1-7] Labial synechiae is almost certainly an acquired condition in girls and results from inflammation that causes adhesion of the labia minora by a thin, bluish, semitransparent membrane. The exact cause of labial adhesions is unclear, but conditions that lead to chronic irritation of the vulva in the hypoestrogenic girl are believed to be important.[5] Local irritation likely leads to epithelial sloughing of the labia minora and the labia adhere and re-epithelialization forming an avascular membrane between the two labia.[8,9] Treatment is usually instituted in the case of symptomatic adhesions or if parental concerns about genital appearance demand intervention.[10] Initial treatment of labial adhesions has consisted of estrogen creams in generally, with twice-daily application of the cream along with gentle traction.[10] Success rates with estrogen cream application range from 50% to 88%.[10, 11] Surgical lysis of labial adhesions is usually reserved for refractory cases unresponsive to conservative therapy. Estrogen creams, however, can have untoward side effects, such as breast budding, labial engorgement, and hyper pigmentation. The purpose of this study is to assess patient demographics, clinical presentation, response to previous treatment and evaluate the efficiency of topical corticosteroid cream insert of the conjugated estrogen cream for the treatment of girls with the labial synechiae as a prospectively.

MATERIALS AND METHODS

This study was carried as a prospectively in private practice. 17 girls with labial synechia among the private pediatric surgical outpatient population were evaluated between February 01, 2004 and October 01, 2005. Sosyocultural characteristics of family, cleaning methods and materials of perineum, status of perineal hygiene, history of urinary symptoms or perineal dermatitis or trauma, previous treatments or recurrence were recorded. All patients only required basic separation with manual or hemostat clamp in the office condition. After separation of adhesions, 0.1% corticosteroid cream was applied twice a day to the labia minora for at least 3 weeks. During the treatment and follow-up, parents were reevaluated and child was examined. Previous treatments such as conjugated estrogen cream application or surgical lysis were determined by family history. The number of previous estrogen cream courses was also recorded. Fourteen patients had no previous treatment; three had been previously treated with

conjugated estrogen cream. Parents of patients were instructed to apply a thin layer of corticosteroid cream twice daily to the labia minora after the lysis. Courses of therapy were 3 weeks in duration. All children were treated with one course, but three of them needed a second course.

RESULTS

The mean age of the patient was 18 months (r: 4 months to 4.5 years). Sosyocultural status of patients families were good levels, perineal hygiene of all patients were very good. All mothers were very careful about perineal cleaning of their child; and same of them were also very obsessive about the perineal cleaning. Same of them were using wipe, some of them were using only wetted cotton. All of them were using best quality diaper. No child had history of vulvovaginitis, diaper dermatitis or known genital trauma. None of them had symptoms of urinary tract infection. Any patient with labial synechia was not screened for bacteriuria. Three patients had got labial synechiae previously; they had used estrogen cream by the other centers. In this study; first the most remarkable findings were that none of the patients had poor perineal hygiene, and secondly all patients treated without any estrogen cream. All patients only treated basic separation with manually or hemostat clamp after topical anesthetic cream have been used in the office. After lysis of adhesions, 0.1% corticosteroid cream was used during 3 weeks. Average follow up was from 2 years to 3.5 years. No adverse effects were noted in any patients like estrogen creams could have breast budding, labial engorgement, and hyper pigmentation. All patients had complete resolution of their labial adhesions. Recurrence were seen in three patients (%17); 5 months later, and 11 months later, and 16 months later, and three recurrence patients had resolution with 2 courses of betamethasone cream. There were no side effects seen in any patient treated with betamethasone cream. Of interest, one of the patients who had been previously treated with estrogen cream at another center previously had developed labial engorgement and breast budding with each course of estrogen cream. These side effects resolved each time the conjugated estrogen cream was terminated.

DISCUSSION

Labial adhesions may present with symptoms such as urinary retention, urinary tract infection, pain, or altered urinary stream.[10] The exact cause of labial fusion is unknown, but it was uniformly suggested that it is an acquired condition.[1,2,3,4] The cause of labial adhesions, or fusion of the labia minora, is not definitively known, but it is hypothesized to be due to hypoestrogenism and vulvar irritation.[11] There are many theories about the occurrence of labial synechiae. Current opinion about the underlying mechanism is the denuding of the upper squamous epithelial layer of the labial mucosa with subsequent formation of a connective tissue bridge between the healing labia. The critical question is why denuding of the upper layer occurs.[8,9]

Normally low estrogen levels in the prepubescent girl may predispose to labial adhesions.[3,4,12] Adequate endogenous estrogens change the vaginal epithelium from a thin atrophic lining to a thick one containing glycogen.[3,13] In addition the neutral pH of the vaginal secretions in the prepubescent girl predisposes to inflammations and infection.[3,12] The majority is asymptomatic and resolve on their own, once endogenous estrogen production begins at puberty.[10] The role of trauma in the development of labial synechiae has not been previously explored. Eliciting a history of sexual abuse on the basis of the physical examination is dependent on the presence of abnormal genital and/or anal findings. However, no patient in our series had any of these conditions. In the infant, feces and urine in the perineal area, as well as occlusive diapers, may inflame the labial mucosa and lead to fusion.[5] On the other hand, Vakar reported vulvovaginitis in 47% of his cases, although some of these had “physiologic desquamative vulvovaginitis” of the newborn infant. In this condition the neonatal mucosa is felt to be particularly vulnerable to invasion by stool flora.[3] Children with seborrheic dermatitis may experience recurrent vulvitis. Atopic eczema infrequently leads to inflammation of the vulva.[3] But no patient in this series had evidence of either seborrheic dermatitis or atopic eczema.

Treatment for labial adhesions is usually reserved for symptoms such as urinary retention, urinary tract infection, painful or altered urinary stream, or for parents concern regarding the appearance of the patient's genitalia.[10] Leung and Robson et al. reported that a urine culture be performed in children with labial fusion and that all girls with urinary tract infection should be checked for labial fusion.[14] Others report an incidence of urinary symptoms with labial fusion from 20% to 50%.[2,14,15,16] But urinary infections were not detected in any patients in this series or in our previous studies; and we show that adhesions of labia minora will keep these patients from fecal contamination; as a result urinary infection is experienced rarely in these patients.[8,9]

Medical treatment for labial adhesions traditionally involves the application of topical estrogen creams such as estrogen cream to the labia and has a reported success rate of 50% to 88%.[7, 11] Topical estrogen creams are usually well tolerated, but side effects such as hyper pigmentation of the labia and breast development have been reported while serious side effects such as vaginal bleeding and precocious puberty are possible.[10, 11] While topical estrogen creams have potentially significant side effects, topical steroid creams such betamethasone are well tolerated in male pediatric patients treated for phimosis.[17] Betamethasone cream appears safe, because no side effects were noted in 27 boys less than 3 years of age who were treated with betamethasone cream twice daily by Elmore et al.[17] Furthermore, morning cortisol levels of topically treated phimotic boys with betamethasone do not differ from control patients.[17,18,19] In this report that twice-daily application of betamethasone cream successfully treated of patients with labial adhesions. This success rate is certainly comparable to the 50% to 88% success rate reported for topically applied estrogen creams.[17-21] Some might question if gentle retraction alone or gentle retraction with a neutral cream for labial adhesions would have comparable results. The results from use of betamethasone cream for the treatment of phimosis would strongly suggest that topical steroid is needed over gentle retraction and neutral cream application alone. Golubovic et al in a double- blind, randomized trial treated 40 boys (age 3 to 6) with phimosis with twice-daily gentle retraction and the application of either 0.05% betamethasone cream or Vaseline.[18] There was a 95% successful foreskin retraction rate in those boys treated with betamethasone cream, versus only 20% in those treated with Vaseline.

Clinical observations Labial cohesiveness of our previous studies belong to two different serial are presented in various congresses and articles have been published as, and in that time we were used estrogen cream in the treatment of the labial cohesiveness.[9,23] Since the early 2000's, natural fimozis light to open and corticosteroid cream to be used in boys, natural fimozis in boys similar to labial cohesiveness in the girls on the opinions put forward to make this work, our idea has emerged. The treatment of mild corticosteroid cream is deemed to be effective in opening labial cohesiveness in this prospective study. No side effects of corticosteroid cream in the treatment of labial cohesiveness, there is similar results using same treatment methods in a retrospective study has shown that.[17-21] The majority of our patients (14 of 17) had not previously been treated with conjugated estrogen cream, and only three patients had previously undergone lysis of adhesions after the estrogen cream therapy in other centers. All patients could be reached for follow-up. Assuming medical therapy didn't failed in any patients lacking follow-up, the three patients with a partial success for late recurrence, the success rate of corticosteroid cream therapy was exact. Any adverse reactions or events in any of our patients treated with corticosteroid cream had seen. Three (17%) of 17 had minor recurrence. This recurrence rate is comparable to the recurrence rates reported by other studies for labial adhesions treated by a variety of strategies.[7-21] Three (17%) of our patients required more than one course of betamethasone treatment. This is also comparable to the number of repeated treatments needed to successfully treat phimosis with corticosteroid cream in the pre-pubertal male. [7-21]

While our study was prospective and small, it suggests that treatment with betamethasone cream applied twice daily is safe, and at least comparable to estrogen cream therapy in the treatment of labial adhesions. Larger, randomized studies comparing topical estrogen cream versus corticosteroid cream are needed to answer this question definitively. Corticosteroid cream appears to be a safe and effective treatment of labial adhesions, while avoiding the potential side effects of estrogen cream. Further studies are necessary to evaluate the long-term success of corticosteroid cream in the treatment of labial adhesions.

Conclusions: According to our clinical observations and findings, there are a lot of discordance between the literature knowledge and labial synechiae like that using estrogen cream and screening of bacteriuria or screening of urinary ultrasonography. In this study; firstly the most remarkable findings were that none of the patients had poor perineal hygiene like our previous observations, and secondly all patients treated without any estrogen cream. So, no adverse effects in this study were noted in any patients like estrogen creams could have breast budding, labial engorgement, and hyper pigmentation.

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