

Kobkan Thongprasom

Liječenje glicerina-boraksom ekfolijativnog heilitisa uzrokovanog natrijevim lauril-sulfatom: prikaz slučaja

Glycerin Borax Treatment of Exfoliative Cheilitis Induced by Sodium Lauryl Sulfate: a Case Report

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Sažetak

U radu se predstavljaju rezultati studije o slučaju 19-godišnje pacijentice koja je došla u Kliniku za oralnu medicinu zaleći se na oljuštene usnice. Te je lezije imala već dulje od sedam godina i nikakvo liječenje nije pomoglo. Njezin dotadašnji liječnik dijagnosticirao je kontaktni dermatitis. Naša dijagnoza glasila je ekfolijativni heilitis. Epikutani test pastom za zube koja je sadržavala natrijev lauril-sulfat (SLS) bio je pozitivan, pa ju je pacijentica odbacila. Umjesto nje počela se koristiti pastom za zube bez SLS-a. Tijekom jednogodišnje terapije 1-postotnom otopinom vodikova peroksida i glicerina-boraksa, stanje joj se postupno poboljšalo i na kraju se lezija potpuno povukla. Glicerina-boraks sigurno je i jeftino sredstvo, jednostavno za korištenje u liječenju otpornoga ekfolijativnog heilitisa. SLS je u ovom slučaju vjerojatno bio uzročnik te tegobe.

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Ključne riječi

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Uvod

Ekfolijativni heilitis rijetko je stanje koje zahvaća vermilion gornje i donje usnice ili obiju usnica. Obilježava ga stalna proizvodnja debelih keratiniziranih ljuskica koje se ljušte te ljuštenje rubnog područja vermilion. Kad se ljuskice uklone, ispod njih su usnice normalnog izgleda. Premda etiologija ekfolijativnog heilitisa nije jasna, s tom bolešću mogu biti povezani čimbenici poput stresa, poremećaja osobnosti ili psihijatrijska stanja (1, 2). To stanje može smanjiti pacijentovu kvalitetu života jer utječe na estetiku i normalne funkcije, poput jedenja, govora i smijanja (3). Neki slučajevi ekfolijativnog heilitisa povezani su s kroničnim ozljedama kao posljedicom nepodobnih navika, kao što su ponovljeni ugrizi, sisanje ili nesvjesno lizanje usnica. Slučajevi ekfolijativnog heilitisa koji nastaju zbog kronične ozljede nazivaju se lažnim heilitisom (4). Iako je ekfolijativni heilitis nepoznate etiologije, može biti povezan s prekomjernom proizvodnjom i naknadnim ljuštenjem debelih ljuski površinskog sloja keratinizirane sluznice. To što nema specifičnoga lijeka čini ekfolijativni heilitis kroničnom bolešću koja uvelike utječe na život pojedinca.

Introduction

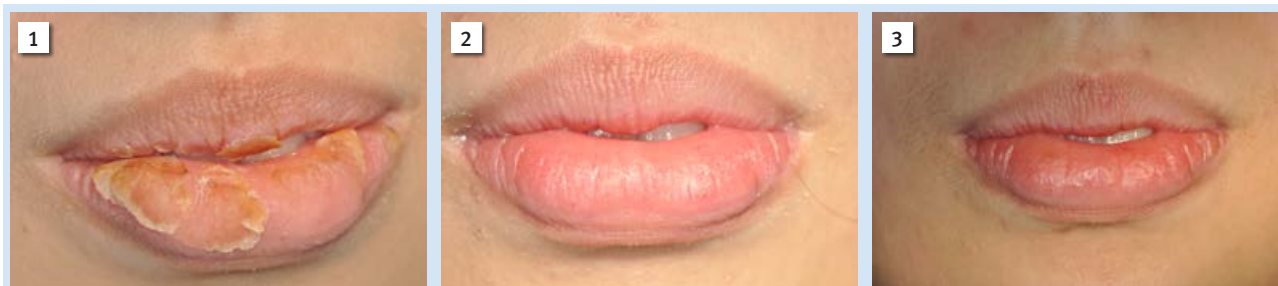
Exfoliative cheilitis (EC) is an uncommon condition affecting the vermilion zone of the upper, lower, or both lips. EC is characterized by the persistent production and desquamation of thick scales of keratin and flaking of the vermilion border. When removed, these scales leave a normal appearing lip underneath. Although the precise etiology of EC remains unclear, factors such as stress, personality disturbances, or psychiatric conditions are associated with its onset (1, 2). This condition can reduce a patient's quality of life by affecting esthetics and normal functions such as eating, speaking, and smiling (3). Some EC cases are related to chronic injury secondary to habits such as repetitive biting, picking, sucking or unconscious licking of the lips. The cases of EC shown to arise from chronic injury are termed factitious cheilitis (4). Although exfoliative cheilitis is a condition of unknown etiology, it may be related to excessive production and subsequent desquamation of thick scales of superficial keratin. The lack of specific treatment makes exfoliative cheilitis a chronic disease that profoundly affects a person's life.

Prikaz slučaja

Devetnaestogodišnja pacijentica došla je u Kliniku za oralnu medicinu Stomatološkog fakulteta Sveučilišta Chulalongkorn u Bangkoku, a njezin glavni problem bile su oljuštene usnice. Lezije su perzistirale već dulje od sedam godina. Pacijentica je liječena lokalnom primjenom kortikosteroida Desoksimesazona (Esperson®), no nije bilo poboljšanja. Dogodilo se suprotno – stanje se pogoršalo. Kada joj je njezin liječnik prepisao Prednizolon 20 mg/dan i antihistaminik, lezije su postale veće, a ljuštile su se odgođeno (slika 1.). Tijekom pregleda ljuštke su bile žučkaste, a pacijentica nije osjećala ni peckanje ni bol pri palpaciji. Istaknula je da su joj usnice suhe i tvrde. Dijagnoza koju je postavio njezin dotadašnji liječnik glasila je *kontaktni dermatitis*. Stoga je primijenjen epikutani test s pozitivnim rezultatom na pastu za zube koja sadržava natrijev lauril-sulfat (SLS). Nakon toga pacijentica je više nije koristila i nabavila je pastu bez SLS-a. Prema uputi liječnika ljuštke je čistila 1-postotnom otopinom vodikova peroksida i lokalno je na lezije tri puta dnevno nanosila glicerol-boraks. Nakon tri tjedna stanje joj se znatno poboljšalo (slika 2.). Tijekom jednogodišnjeg praćenja i liječenja sve se postupno popravljalo i vratilo u normalu (slika 3.). Glicerol-boraks pokazao se učinkovitim u liječenju ekfolijativnog heilitisa bez nuspojava. Riječ je o sigurnom i jeftinom pripravku, jednostavnom za korištenje. Bolesnici s pozitivnom epikutanom reakcijom na SLS trebali bi izbjegavati paste za zube koje sadržavaju taj sastojak. Uspjeh u liječenju perzistentnog heilitisa ovisi o eliminaciji čimbenika koji pogoduju tom stanju. Također ovisi o konzervativnom liječenju.

Case report

A 19-year-old female presented to the Oral Medicine clinic, Faculty of Dentistry, Chulalongkorn University in Bangkok with a chief complaint of scaly and peeling lips. The lesions had persisted on her lips for more than 7 years. She had been treated with a topical steroid, Desoximetasone (Esperson®), however, the lesions did not improve. In fact, the lesions were aggravated. When prednisolone 20 mg/day and antihistamine were administered by her physician, the lesions presented larger scales and delayed exfoliation (Figure 1). During examination, the scales were yellowish and the patient did not have any burning sensation or pain on palpation. The patient described her lips as dry and inflexible. The previous diagnosis of her lip lesions by her physician was contact dermatitis. Therefore, a patch test was done and the results were positive to toothpaste containing sodium lauryl sulfate (SLS). Subsequently, the patient changed her toothpaste and started using the toothpaste without SLS. Her scaly lesions were cleaned with hydrogen peroxide mouthwash 1% and glycerin borax was topically applied to the lesions three times a day. After three weeks of treatment, the lesions showed marked improvement (Figure 2). During one year of follow-up and treatment, her lesions gradually improved until her lips returned to a normal appearance (Figure 3). Thus, glycerin borax was proved to be effective in the treatment of EC without any side effects. Glycerin borax is safe, low cost, and simple to use in the treatment of refractory EC. Patients with a positive patch test reaction to this agent should avoid using SLS containing toothpaste. Treatment success depends on the successful management of refractory EC by eliminating the aforementioned contributing factors. It also depends on conservative treatment.



Slika 1. Žute suhe ljuštke na usnama 19-godišnje pacijentice s ekfolijativnim gingivitisom

Figure 1 Yellowish dry scales on the lower and upper lips of a 19-year-old female patient with exfoliative cheilitis.

Slika 2. 3 tjedna nakon početka tretmana 1%-tnim H₂O₂ i glicerol-boraksom, stanje je poboljšano

Figure 2 Three weeks after initiating treatment with hydrogen peroxide 1% and glycerin borax, the appearance of the lips of the patient was improved.

Slika 3. Godinu dana nakon liječenja 1%-tnim H₂O₂ i glicerol-boraksom lezije su nestale te nema drugih znakova bolesti.

Figure 3 One year after treatment with hydrogen peroxide 1% and glycerin borax, the lesions showed marked improvement and complete remission

Rasprava

Opisani su različiti načini liječenja ekfolijativnog heilitisa (5–8). Glicerol-boraks je antiseptik, a koristi se uglavnom u usnoj šupljini. Liječenje ekfolijativnog heilitisa otežano je zbog njegove kronične prirode. U nekim ranijim studijama isticalo se da se ta bolest uspješno liječi topikalnim takroli-

Discussion

Various EC treatments have been reported (5-8). Glycerin borax is an antiseptic and is used primarily in oral and dental applications. The treatment of EC is difficult due to its chronic nature. A previous report showed that this disease was successfully treated with topical tacrolimus (5). In-

musom (5). Zanimljivi rezultati dobiveni su u istraživanju u kojem su autori pokazali da korištenje površinskih inhibitora kalcineurina (takrolimus i pimekrolimus) i sredstava za vlaženje rezultiraju kliničkim poboljšanjem ekfolijativnog heilitisa s potpunom ili djelomičnom remisijom lezija na gornjoj i donjoj usnici (6). No, izjavili su da je bilo teško ustanoviti jesu li pacijenti reagirali zbog protuupalnog učinka masti ili zato što su mast ili hidratantni agensi djelovali kao emolijensi i tako uklonili suhoću usnica. Pretpostavlja se također da su primijenjena sredstva zaštitila lezije od iritacija. Osim toga, autori su nastojali podignuti svijest pacijenata o nesvjesnim navikama kako bi se smanjila trauma zahvaćenog mjesta.

Neki istraživači navode da se ekfolijativni heilitis može liječiti antidepresivima (7). Kronične suhe luskave lezije ekfolijativnog heilitisa koje narušavaju izgled tretirane su neograničenom lokalnom primjenom 10-postotne masti *Calendule officinalis* (8). U opisanom slučaju početno liječenje pacijentice sistemskom primjenom kortikosteroida i lokalnim kortikosteroidima nije bilo učinkovito. Naprotiv, lezije su se proširile. Dakle, stanje se nije poboljšalo. Preporučeno joj je da prestane prati zube pastama koje sadržavaju SLS i predložene su joj paste bez toga sastojka. U kontroliranom randomiziranom istraživanju uspoređena je učinkovitost čišćenja zuba pastama bez SLS-a i pastama sa SLS-om s obzirom na pojavu gingivitisa kod mladih odraslih osoba u dobi od 18 do 34 godina (9). Istraživanje je pokazalo da je pasta za zube bez SLS-a bila učinkovita u čišćenju zuba kao i obična pasta koja sadržava SLS s obzirom na indekse gingive, krvarenja i plaka. Također se pokazalo da nema znatne razlike u učestalosti abrazije gingive. Osim toga, u nedavno objavljenom istraživanju otkriveno je da paste za zube koje sadržavaju SLS uzrokuju leukoedeme i ljuštenje sluznice (10). Dugoročna primjena takve paste može pridonijeti ljuštenju epitela usnica, kao što je prikazano i u ovom slučaju. Paste za zube bez SLS-a preporučuju se pojedincima s pozitivnom reakcijom epikutanog testa na tu tvar.

Tijekom liječenja pacijentice, lokalno je bio primijenjen glicerol-boraks nakon čišćenja lezija vodikovim peroksidom (1 %). Tijekom jednogodišnjeg liječenja stanje se postupno poboljšavalo. Naposljetku su se lezije potpuno povukle, a usnice dobile normalan izgled. Na kontrolnom pregledu uočeno je vraćanje ljuskica ali u blažem obliku, no povukle su se nakon nanošenja glicerol-boraksa.

Na temelju rezultata postignutog u opisanom slučaju, primjena glicerol-boraksa i 1-postotne otopine vodikova peroksida pokazala se korisnom alternativnom terapijom u slučaju ekfolijativnog heilitisa. Ta sredstva bila su jednako učinkovita i u liječenju refraktornog ekfolijativnog heilitisa. Radi se o jeftinim lijekovima, bez ikakvih nuspojava tijekom dugotrajnog liječenja. U ovom slučaju SLS je vjerojatno bio predisponirajući čimbenik za ekfolijativni heilitis. Pri odabiru paste za zube pacijenti s pozitivnom reakcijom epikutanog testa na SLS trebaju izbjegavati paste s tim sastojkom.

Interesno, a single center study reported that the use of topical calcineurin inhibitors (tacrolimus and pimecrolimus) and moisturizing agents for managing EC resulted in clinical improvement with complete or partial remission of the lesions on both the upper and lower lips (6). However, the authors stated that it was difficult to determine whether the patients responded because of the anti-inflammatory effect of the ointment or because the ointment or moisturizing agents acted as emollients keeping the patients' lips from getting dry. Also, they assumed that the agents applied to lesions protected the area from irritants. Besides, the authors made efforts to increase the patients' awareness about the unconscious habits, helping them to reduce trauma to the site.

Some researchers reported that EC could be managed with an antidepressant medication (7). A chronic dry scaly EC lesion that resulted in reduced esthetics was treated with a topical preparation of *Calendula officinalis* ointment 10% used *ad libitum* (8). In the present case, the initial treatment, by the patient's physicians, with systemic steroids and topical steroids on the EC lesions was not effective. On the contrary, the lesions expanded and did not improve. Discontinuing the use of toothpaste containing SLS was recommended and the use of toothpaste without SLS was suggested. A randomized control trial compared the efficacy of a dentifrice without SLS to a dentifrice with SLS on gingivitis in young adults aged 18-34 years (9). The study showed that the toothpaste without SLS was as effective as a regular SLS dentifrice on gingival bleeding scores and plaque scores. It also showed that there was no significant difference in the incidence of gingival abrasion. Moreover, a recent report found that toothpaste containing SLS caused leukoedema and mucosal desquamation (10). The long-term use of a toothpaste containing SLS might contribute to epithelial desquamation on the lips, as shown in the present case. The toothpaste without SLS is recommended for an individual who had positive patch test reactions to this agent.

During the treatment of our patient, glycerin borax was applied to her lesions topically after the lesions had been cleaned with hydrogen peroxide (0.1%). The lesions showed gradual improvement during one year of treatment. Subsequently, the lesions showed complete remission and her lips returned to a normal appearance. Only a very mild scaly recurrence on her lips was observed during the follow-up and the lesions resolved after applying glycerin borax.

Based on our patient's outcome, the application of glycerin borax and hydrogen peroxide mouthwash (1%) proved to be useful in alternative treatment of EC. Also, these agents proved to be equally effective in the treatment of refractory EC. These medications are low cost and without any side effects during long-term treatment and follow-up. In the present case, SLS may have been the precipitating factor for EC. When choosing toothpaste, avoiding SLS in toothpaste should be recommended to patients with positive patch test reactions to SLS during management of this lesion.

Zahvala

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Sukob interesa

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Conflict of interest

None declared

Abstract

This paper reports on the results of a case study of a 19-year-old female who presented to the Oral Medicine clinic with a chief complaint of scaly and peeling lips. The lesions had persisted on her lips for more than 7 years and were refractory to previous treatment. Her physician's diagnosis was contact dermatitis. We diagnosed this patient as having exfoliative cheilitis (EC). A patch test using the toothpaste containing sodium lauryl sulfate (SLS) was positive and the patient discontinued using it. Instead, she started using a toothpaste not containing SLS. One year after treating her lesions with hydrogen peroxide mouthwash 1% and glycerin borax, a gradual improvement was observed until returning to normal. Glycerin borax was safe, low cost and simple to use in treatment of refractory exfoliative cheilitis. SLS may have been a precipitating factor in EC in this case.

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Key words

Cheilitis; Sodium Dodecyl Sulfate; Hydrogen Peroxide; glycerin borax

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