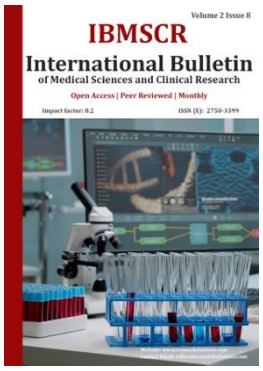

EXFOLIATIVE FORM OF CHEILITIS

Muydinova Barnokhon Askarovna
Dentistry faculties, Senior lecturer of Therapist
dentistry department
Andijon Davlat Tibbiet Institute
https://doi.org/10.5281/zenodo.19691727

Abstract. Exfoliative cheilitis is an uncommon chronic inflammatory disorder of the vermilion characterized by persistent desquamation, keratinous scale formation, crusting, and periodic re-epithelialization. Although the disorder has been recognized for decades, its nosological boundaries remain unstable because clinically similar presentations may arise from factitial injury, allergic or irritant reactions, infection, chronic lip-licking, or other inflammatory cheilitides. The exfoliative form therefore occupies a difficult position in oral medicine and dermatology: it is visually distinctive, yet diagnostically nonspecific. This article analyzes the condition from a contemporary clinical and academic perspective, with attention to etiology, pathogenesis, symptomatology, differential diagnosis, histopathology, management, and prognosis. The review argues that exfoliative cheilitis should be approached primarily as a diagnosis of exclusion, requiring careful correlation of history, examination, psychosocial assessment, and selected laboratory or histological investigations.

Keywords: exfoliative cheilitis, chronic cheilitis, vermilion, factitial cheilitis, lip desquamation, calcineurin inhibitors.

Introduction

Exfoliative cheilitis is generally defined as an uncommon inflammatory condition affecting the vermilion of one or both lips and marked by continuous production and shedding of thick keratin scales. Classical descriptions emphasize a striking clinical cycle: adherent crusts accumulate, are shed or removed, and reveal an erythematous or relatively normal underlying surface before crusting recurs. The condition may involve the upper lip, the lower lip, or both, although the lower lip is often more conspicuously affected. In the older oral pathology literature, the disorder was already described as therapeutically frustrating and of uncertain cause, and that uncertainty has not been fully resolved in more recent work [1]. Contemporary dermatologic sources still characterize it as a rare reactive condition rather than a well-delimited disease entity with a single pathogenesis [1], [2].

Materials and methods

From a pathogenetic perspective, exfoliative cheilitis remains incompletely explained. The literature does not support one universal etiologic mechanism. Instead, the condition appears to arise through several converging pathways that all culminate in abnormal keratinization and chronic surface injury of the vermilion. DermNet identifies aggravating or perpetuating factors such as mouth breathing, lip licking, lip sucking, lip picking, and lip biting; secondary colonization by *Staphylococcus aureus* or *Candida albicans* may also worsen the clinical picture [2]. Earlier reviews likewise noted that some cases appear factitious, meaning that repetitive self-induced trauma drives the cycle of desquamation [1]. More recent discussions have added the possibility that, in selected patients, allergic or hypersensitivity-related mechanisms may contribute to chronic inflammation, although this line of evidence is

still limited and does not explain the entire spectrum of disease. The safest conclusion is that exfoliative cheilitis is etiologically heterogeneous and probably represents a final common clinical pattern rather than a single disease process [1], [2], [3].

Clinical presentation is relatively characteristic, even if it is not pathognomonic. Patients usually report chronic peeling, dryness, burning, tenderness, fissuring, or intermittent bleeding. The vermilion may appear erythematous before developing an adherent hyperkeratotic or hemorrhagic crust, and different parts of the lip may be at different stages of the peeling cycle. One useful clinical observation is that removal of crusts may expose a comparatively normal or only mildly inflamed surface beneath, after which the scale re-forms. The course is often chronic, fluctuating over months or years, and may worsen during periods of emotional stress. Epidemiologic descriptions vary. DermNet states that the condition has been reported mainly in young adults under 30 and affects both sexes, whereas the single-center retrospective series by Almazrooa and colleagues found a median age of 59 years and a female-to-male ratio of 2:1 among 15 patients. This discrepancy likely reflects the rarity of the condition, referral bias, and inconsistent case definition across reports rather than a settled demographic pattern [2], [3].

Results and discussion

Diagnosis is the most difficult aspect of management because exfoliative cheilitis is fundamentally a diagnosis of exclusion. There is no single laboratory marker or histopathologic finding that independently confirms it. The clinician must distinguish it from contact cheilitis, actinic cheilitis, lip-licker's dermatitis, candidiasis, herpes simplex, lichen planus, lupus erythematosus, psoriasis, glandular cheilitis, plasma-cell cheilitis, and, in persistent unilateral or indurated cases, premalignant or malignant lesions. General reviews on cheilitis emphasize that erythema, fissuring, superficial desquamation, burning, and crusting recur across multiple lip disorders and therefore require structured diagnostic reasoning rather than visual impression alone [4]. DermNet recommends swabs for candidal or staphylococcal infection and biopsy when needed to exclude mimics, while also noting that histology may remain nonspecific [2]. This is why history-taking is diagnostically central: habits, cosmetic exposures, dentifrices, sun exposure, atopy, psychiatric history, and symptom chronology may be more informative than the microscopic picture alone [2], [4].

Histopathology in exfoliative cheilitis has limited specificity. Reported findings include hyperkeratosis, parakeratosis, and mild chronic inflammatory infiltrates, but these changes are compatible with reactive injury and do not decisively separate exfoliative cheilitis from related traumatic or inflammatory conditions. Taniguchi's case review described biopsy findings of parakeratosis and mild inflammation without fungal infection, consistent with but not uniquely diagnostic of exfoliative cheilitis [1]. Other reports likewise stress that biopsy serves primarily to exclude alternative pathology rather than to establish a pathognomonic signature. For this reason, clinicians should resist the error of treating the biopsy label as etiologic closure. When the histology is bland and the clinical course is chronic, recurrent, and behaviorally patterned, the more relevant question becomes not "What is the microscopic name?" but "What factors are continually re-injuring the vermilion?" [1], [2], [4].

A major interpretive issue concerns the relationship between exfoliative cheilitis and factitial cheilitis. Increasingly, the literature suggests that at least a proportion of patients initially labeled with exfoliative cheilitis actually have self-induced disease related to lip

picking, biting, peeling, or other repetitive behaviors. Girijala and colleagues presented factitial cheilitis as a diagnosis of exclusion that may clinically mimic the exfoliative form and frequently occurs in the setting of anxiety disorders or psychosocial stressors [5]. DermNet similarly notes that factitial behavior or obsessive-compulsive tendencies can present as exfoliative cheilitis and that psychiatric assessment may be especially helpful in selected cases [2]. This does not mean that every patient with crusting lips has a psychiatric disorder, nor does it justify reductionist psychologization. It means, rather, that chronic lip disease can be behaviorally maintained, and that management fails when clinicians ignore this possibility. In academic terms, the overlap between exfoliative and factitial cheilitis demonstrates that morphology alone cannot ground diagnosis; psychosocial context is often part of the pathology itself [2], [5].

Treatment remains challenging because no universally effective regimen has been established. Historical reports describe unsuccessful or inconsistent responses to keratolytics, sunscreens, antifungals, corticosteroids, antibiotics, vitamin D analogues, cryotherapy, and assorted topical preparations [1], [2]. The single-center experience reported by Almazrooa et al. is one of the more informative clinical datasets available: among the 10 of 15 patients who returned for follow-up, the overall partial-or-complete response rate was 80% at a median of two months, and improvement was most frequently associated with topical calcineurin inhibitors or moisturizing agents [3]. These data do not prove superiority in the strict evidence-based sense, because the study was retrospective and small, but they do suggest that barrier support plus anti-inflammatory topical therapy is a rational practical strategy. At minimum, the study weakens the assumption that refractory cases should automatically be escalated to destructive or invasive measures [3].

The strongest controlled evidence currently cited in this niche field concerns topical tacrolimus. Liu et al. conducted a randomized controlled clinical trial in 40 patients comparing tacrolimus 0.03% ointment with triamcinolone acetonide 0.1% cream over three weeks. According to the abstract information indexed online, the three-month recurrence rate was higher in the control group, while tacrolimus blood concentrations remained below 5 ng/mL, supporting a favorable short-term safety profile and good short-term efficacy [4]. This trial is important because exfoliative cheilitis literature is otherwise dominated by case reports and small series. Even so, caution remains necessary: the sample was modest, follow-up was relatively short, and long-term relapse patterns remain insufficiently characterized. Still, among currently discussed topical options, tacrolimus has the most substantive direct evidence base for exfoliative cheilitis [4].

Management, however, should not be reduced to pharmacology. A genuinely effective plan must identify and remove perpetuating factors. If bacterial or candidal superinfection is present, it should be treated. If lip licking, biting, picking, or sucking is part of the clinical picture, behavioral interruption is indispensable. If the history suggests allergic or irritant triggers, exposure modification becomes central. If anxiety, depression, obsessive-compulsive symptoms, or a factitial pattern is present, psychological or psychiatric intervention may be necessary for durable remission. DermNet explicitly states that treatment of associated mood or anxiety disorders has been reported to improve factitial exfoliative cheilitis, and earlier case literature described benefit from antidepressant therapy in selected patients [1], [2]. Therefore, the most defensible therapeutic model is multimodal: emollient support, targeted anti-

inflammatory treatment, microbiologic control when indicated, and psychosocial intervention when relevant [1], [2], [5].

Conclusion

Exfoliative cheilitis should be understood as a rare but clinically significant chronic lip disorder defined more by a recognizable pattern of persistent vermilion desquamation than by a single established etiology. The academic literature consistently supports three conclusions. First, the condition is real but heterogeneous: the same morphologic picture may reflect idiopathic inflammation, repetitive trauma, factitial behavior, infection, irritation, or mixed causation. Second, diagnosis is principally exclusionary and requires careful differentiation from other forms of cheilitis and from malignant or premalignant disease. Third, treatment works best when it is individualized and etiologically directed rather than empiric and purely symptomatic

References:

1.Daley T. D., Gupta A. K. Exfoliative cheilitis // Journal of Oral Pathology & Medicine. 1995. Vol. 24. No. 4. P. 177–179.

2.Taniguchi S., Kono T. Exfoliative cheilitis: a case report and review of the literature // Dermatology. 1998. Vol. 196. No. 2. P. 253–255.

3.Almazrooa S. A., Woo S.-B., Mawardi H., Treister N. Characterization and management of exfoliative cheilitis: a single-center experience // Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology. 2013. Vol. 116. No. 6. P. e485–e489.

4.Liu J., Shi L., Wang X., Wu F., Hu M., He J., Lin M., Wang H., Zhou H. Tacrolimus 0.03% ointment treatment in exfoliative cheilitis: a randomised controlled clinical trial and monitoring blood concentration // Journal of Oral Pathology & Medicine. 2021. Vol. 50. No. 2. P. 251–259.

5.Girijala R. L., Falkner R., Dalton S. R., Martin B. D. Exfoliative cheilitis as a manifestation of factitial cheilitis // Cureus. 2018. Vol. 10. No. 5. Article e2565.