

Squamous Syringometaplasia in Erythema Multiforme: A Case Report

Introduction

- Squamous syringometaplasia (SSM) is a histopathological finding characterized by the replacement of normal cuboidal cells lining eccrine glands and ducts with keratinizing squamous cells.^{1,3}
- This metaplastic change has been reported in association with various conditions, including chemotherapy-induced reactions, infectious diseases, and inflammatory disorders involving the skin.²
- Erythema multiforme (EM) is an acute, self-limiting mucocutaneous condition typically presenting with characteristic target lesions on the skin and mucous membranes.⁵
- The condition is often triggered by medications or infections, particularly herpes simplex virus.¹
- While SSM has been documented in numerous dermatological conditions, to our knowledge, its occurrence in erythema multiforme has not been previously reported in the literature.^{1,2}
- This case report presents a novel association between SSM and EM, expanding our understanding of the histopathological spectrum of EM and the conditions associated with SSM.

Clinical Findings

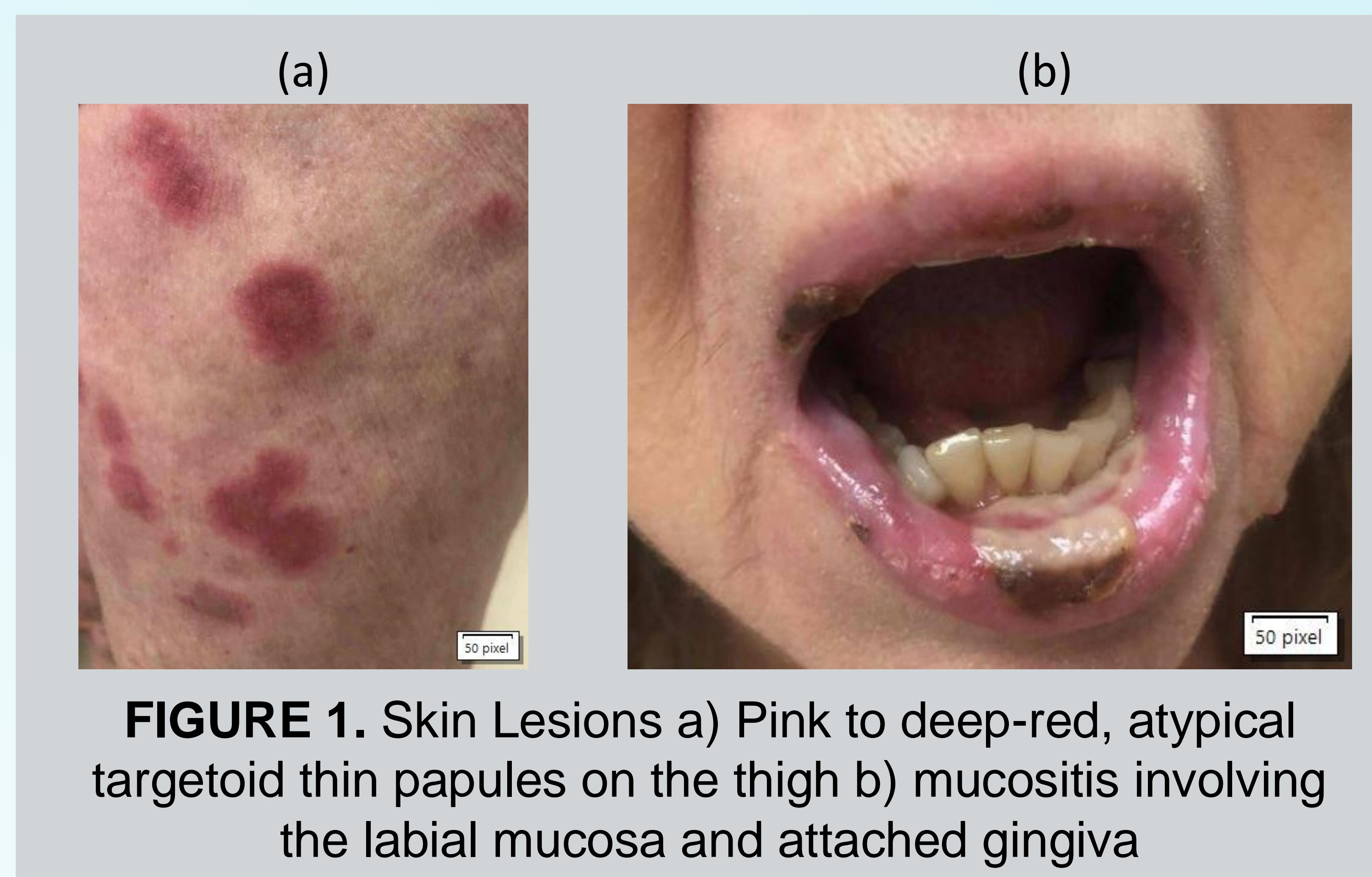


FIGURE 1. Skin Lesions a) Pink to deep-red, atypical targetoid thin papules on the thigh b) mucositis involving the labial mucosa and attached gingiva

Case Presentation

- A 79-year-old woman with a history of obstructive sleep apnea, hypertension, hyperlipidemia, and atrial fibrillation presented with a one-week history of mucositis and rash. On examination, she exhibited scattered pink to deep-red oval and targetoid papules and plaques on the thighs, with some lesions showing dusky centers (Figure 1a). Erosive mucositis was noted involving the labial mucosa and attached gingiva (Figure 1b).
- The clinical differential diagnosis favored erythema multiforme over fixed drug eruption, reactive infectious mucocutaneous eruption, urticarial bullous pemphigoid or pemphigus vulgaris. Atypical targetoid lesions were observed, particularly on the right upper arm and thighs. Stevens-Johnson syndrome was considered unlikely due to lack of a drug trigger, the absence of systemic symptoms and conjunctival involvement.
- Histopathological examination revealed full-thickness epidermal necrosis with focal interface dermatitis and a superficial perivascular lymphocytic infiltrate (Figure 2a). Notably, focal eccrine squamous syringometaplasia was identified, characterized by keratinizing squamous cells involving the eccrine ducts (Figure 2b). These findings supported a diagnosis of erythema multiforme or an interface drug eruption.
- No precipitating infectious or drug cause was identified, and the patient's condition resolved with a tapering course of oral corticosteroids.

Microscopic Findings

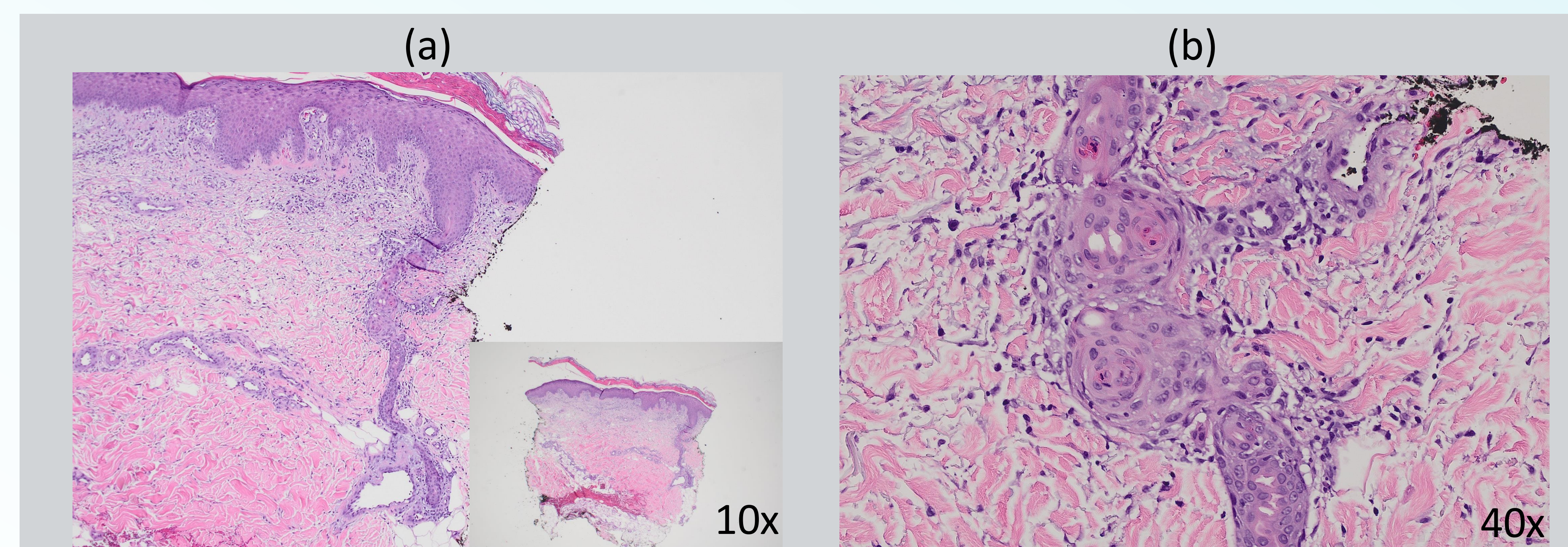


FIGURE 2. Histology a) Full-thickness epidermal necrosis with focal interface dermatitis and superficial perivascular lymphocytic infiltrate b) Focal eccrine squamous syringometaplasia showing keratinizing squamous cells lining eccrine ducts

Discussion

Condition	Category
Chemotherapy (various agents)	Medications
Herpes Virus Infection	Infectious
Cytomegalovirus Infection	Infectious
Squamous Cell Carcinoma	Neoplastic
Fibrous Hamartoma of Infancy	Neoplastic
Systemic Lupus Erythematosus	Inflammatory
Morphea	Inflammatory
Sclerodermatous Graft-Versus-Host Disease	Inflammatory
Adjacent to Ulcers and Burns	Miscellaneous
Healing Wounds	Miscellaneous
Erythema Multiforme	Novel Finding

Table 1: Conditions associated with squamous syringometaplasia

- This case report presents a novel association between SSM and EM, expanding the known spectrum of conditions linked to SSM.
- Recognizing such associations can aid clinicians and pathologists in better understanding and diagnosing complex dermatological conditions.
- Further research is needed to elucidate the mechanisms driving SSM in inflammatory skin disorders.

References

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