



## BLACK PHENYLE-INDUCED FLAGELLATE DERMATITIS

### Dermatology

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### ABSTRACT

Flagellate dermatitis is an uncommon cutaneous eruption characterized by linear, whip-like erythematous streaks. It has been classically associated with bleomycin therapy, shiitake mushroom ingestion, and dermatomyositis. However, chemical ingestion-induced flagellate patterns are rarely reported. We present a unique case of flagellate dermatitis secondary to black phenyle ingestion, highlighting a novel etiology and the possible pathogenic mechanisms involved.

### KEYWORDS

Whip Like or Flagellate Erythematous Streaks, Black Phenyle Ingestion

### INTRODUCTION

Flagellate dermatitis is a distinctive dermatosis presenting as linear, erythematous, or hyperpigmented streaks resembling whip marks. The classic causes include bleomycin-induced toxicity, shiitake mushroom ingestion, and dermatomyositis.<sup>3</sup> Other rare etiologies include intake or contact with chemicals and certain drugs. Black phenyl, containing phenolic compounds such as creosote oil, carbolic acid, and monochlorophenol, is commonly used as a household disinfectant and known for its systemic toxicity when ingested. However, its cutaneous manifestation in the form of flagellate lesions is sparsely documented. Here, we describe a case of black phenyle ingestion leading to flagellate dermatitis.<sup>4</sup>

### Case Report

A 51-year-old female presented with complaints of red, streak-like lesions associated with itching and burning sensation over the inframammary region and buttocks for one day. The lesions developed following accidental ingestion of a phenyl compound. There was no history of trauma, chemical spillage, tight clothing, or bleeding from any orifices. The patient denied any history of chemotherapeutic drug exposure, mushroom ingestion, or similar lesions in the past.

Cutaneous examination: Multiple well-defined linear, whip-like erythematous to violaceous streaks predominantly over the bilateral inframammary region and right buttock, with few ill-defined, haphazardly arranged erythematous streaks on the left abdomen. Mucosa, scalp, and nails were unremarkable.

A diagnosis of flagellate dermatitis secondary to phenyl ingestion (Whip lash phenomenon) was made based on clinical findings and temporal correlation. The patient was managed symptomatically with oral antihistamines, emollients, and topical corticosteroids. Lesions resolved with post-inflammatory hyperpigmentation over two weeks.<sup>4</sup>



Linear erythematous to violaceous streaks over the inframammary area.



Ill-defined flagellate streaks over the right buttock and left abdomen.

### DISCUSSION

Flagellate dermatitis refers to a peculiar eruption of linear, whip-like erythematous streaks. The pathogenesis varies with the underlying cause. In bleomycin-induced cases, it is attributed to direct drug toxicity and cytokine-mediated inflammatory response.

In shiitake mushroom dermatitis, lentinan, a thermolabile polysaccharide, triggers a toxic or allergic reaction.<sup>3</sup>

The mechanism in phenyl-induced dermatitis is not clearly understood. Phenolic compounds are potent irritants that can cause systemic inflammatory responses and cutaneous hypersensitivity. It is hypothesized that phenyl ingestion may provoke dermal inflammation through circulating toxic metabolites, with linear morphology accentuated by scratching or pressure. The subsequent pigmentary changes likely result from post-inflammatory dyschromia. Very few cases of phenolic compound ingestion leading to flagellate morphology have been reported in the literature. Recognition of such rare triggers is important for appropriate diagnosis and management, preventing unnecessary investigations for systemic causes.<sup>4</sup>

### CONCLUSION

This case highlights black phenyle ingestion as a rare and under-recognized cause of flagellate dermatitis. Awareness of such chemical-induced patterns broadens the differential diagnosis of linear eruptions. A thorough clinical history and correlation with exposure history are essential for accurate diagnosis and prompt management.<sup>4</sup>

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