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# A Case Report of Pathergy-Like Reaction in a Patient with Behçet's Disease Triggered by Wax Epilation

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Dear Editor:

The diagnosis of Behçet's disease is based on clinical findings and pathergy test positivity supports the diagnosis<sup>1</sup>. Pathergy reaction, first described by Blobner in 1937, is a nonspecific inflammatory response of the skin to trauma. Pathergy test is usually performed on the flexor forearm by at least two intradermal punctures with a 20~22 gauge needle, and the test is considered positive if an erythematous papule or pustule is seen at the puncture site af-

ter 24~48 hours. Although it is considered as hyper-reactivity of the skin to intradermal prick, papulopustular lesions after laser epilation and oral aphthous lesions developing right after orthodontic treatment were also regarded as a manifestation of pathergy reaction<sup>2</sup>. Here we present a patient with diffuse papulopustular lesions after wax epilation, a pathergy-like reaction which has not been reported previously in the literature.

A 31-year-old, patient with BD admitted to our department with papulopustular lesions that had developed on the pubic area in two days following wax epilation. The patient was diagnosed as BD due to recurrent oral ulcers, genital ulcers, erythema nodosum lesions, and a positive pathergy test. One year ago, the patient had had deep vein thrombosis of the lower extremity but had no other evidence of systemic involvement. Dermatologic examination revealed a minor aphthous ulceration on the oral mucosa, erythema nodosum lesions on lower extremities and papules and pustules localized only in the genital area. Routine hematologic and biochemical tests were normal, the sedimentation rate was 20 mm/hour and C-reactive

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**Fig. 1.** Papules and pustules in the genital area developing after wax epilation.

protein was 18 mg/L. A swab culture from the lesions was sterile. Azathioprine treatment was added to colchicine treatment because of vascular involvement and topical steroid was prescribed for the genital lesions which resulted in rapid improvement in one week. Two months later, the patient admitted again with similar papulopustular lesions on the pubic area following wax epilation and the lesions (Fig. 1), were evaluated as a manifestation of pathergy-like reaction. We received the patient's consent form about publishing all photographic materials.

Pathergy reaction is defined as an inflammatory response of the skin following intradermal puncture<sup>1-3</sup>. However pathergy reaction may also manifest as a systemic response. Uveitis developing after ocular surgery, synovitis after arthrocentesis, and aneurysms arising after vascular intervention in Behçet's patients have all been associated with pathergy phenomenon<sup>3,4</sup>.

Although a similar pathergy-like reaction following laser epilation has been reported<sup>2</sup> pathergy-like reaction after wax epilation has not been reported previously. The lesions of our patient were clinically similar to waxing induced folliculitis which is usually secondary to infection with *Staphylococcus aureus*, *Streptococcus pyogenes*, or *Pseudomonas aeruginosa*<sup>5</sup>. However, in our patient swab culture was sterile, recurrent episodes of papulopustular lesions were noted after wax epilation, and the lesions regressed with topical steroids, suggesting the diagnosis of

pathergy like reaction.

Waxing is a commonly used epilation method and since we have also seen genital ulcerations in our patients with BD following wax epilation, patients should be warned about the potential triggering of pathergy-like reaction following waxing.

## CONFLICTS OF INTEREST

The authors have nothing to disclose.

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